



Diabetes Watch

A Publication of the Philippine Diabetes Association

Year XXII • No.2

July-December 2005



Member, International Committee
of Diabetes Magazines
International Diabetes Federation (IDF)

Many go blind . . .

undergo dialysis

suffer stroke

become impotent

. . . lose a limb

Deadly ang diabetes

Ask your doctor about it.

Put **F**eet **F**irst **P**revent **A**mputations • **S**ecret **D**iabetes **M**anagement **R**ecipe
Fatty **L**iver **P**rimer • **D**iabetes **E**ducation **I**mportant? • **T**he **T**ruth **A**bout **L**ow **B**ack **P**ain



NEW

1 gram

METFORMIN
GLUCOPHAGE®**Cardioprotection, long-term benefits**

- Glucophage targets hyperglycemia by reducing insulin resistance¹
- Glucophage also targets other metabolic syndrome-related factors²
- Only Glucophage is proven to improve survival³
- Provides cardiovascular protection properties in experimental clinical studies²

References:

- Cuzi K, Consoli A, DeFronzo RA. Metabolic effects of metformin on glucose and lactate metabolism in non-insulin dependent diabetes mellitus. J Clin Endocrinol Metab 1996; 81 (11): 4059-67.
- Landin K, Tengborn L, Smith U. Treating Insulin Resistance in hypertension with metformin reduces both blood pressure and metabolic risk factors. J Intern Med 1991 Feb; 229:181-7
- UK Prospective Diabetes Study (UKPDS) Group. Effect of intensive blood glucose control with metformin on complications in overweight patients with type 2 diabetes (UKPDS 34). Lancet 1998; 352: 854-865.

**metformin HCl**
glibenclamide**glucovance®****Unsurpassed control made simple**

► 250/1.25 mg ► 500/2.5 mg ► 500/5 mg tablets

- Simultaneously targets two main defects of Type 2 diabetes in one tablet
- Highly effective at low doses, thus preserving tolerability
- Improves compliance
- Earlier release of glibenclamide postprandially

**In goiter prevention****POTASSIUM IODIDE****JODID 100®****Let iodine intervene****GLICLAZIDE**
DIANORM®**All the benefits of Gliclazide
made more affordable****Levothyroxine****Euthyrox®****Establishing hormonal balance
in Hypothyroidism****Merck CardioMetabolic Care**

Full prescribing information available upon request

Merck, Inc.

24/F GT Tower International

6813 Ayala Ave. cor. H. V. dela Costa St., Salcedo Village,

1227 Makati City Philippines

Tel. No.: (632) 815-4067





Features



10

Secret Diabetes Management Recipe

Medical expenses have gone down dramatically

12

For Better or For Worse

Faith is a refusal to panic



15

Put Feet First Prevent Amputations

The time to act is **now!**



17

Footcare Guide

Timely tips

18

The Truth About Low Back Pain

Understanding the structure of your back, the risk factors to low back pain, and proper body mechanics.



20

PDA On The Move

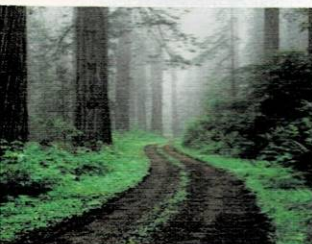
2005 pictorial flash back



23

Journey Of A Diabetic Nun

Her story and her particular brand of courage would inspire others similarly afflicted.



25

It Is Wise To Gain Knowledge From Experience

but wiser to learn from the experience of others



27

Diabetes Education: Is It Really Important?

"He who knows the most lives the longest."



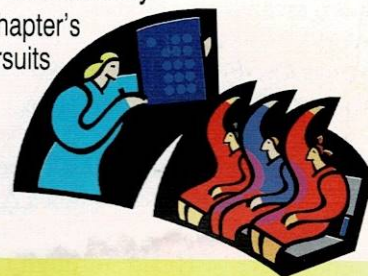
30

Fatty Liver It is a common finding in patients who are very overweight or have diabetes mellitus.

35

Met The Sweet Alert Society

PDA Cebu Chapter's sweet selfless pursuits



5 PDA Chapters

38 Research **W**inners

Departments

4 Your President **S**peaks

7 Meanderings

9 Everything You **W**anted To **K**now About **D**iabetes

33 Kitchen **C**orner

39 The **L**ighter **S**ide of **D**iabetes

Your President speaks



THE PHILIPPINE DIABETES ASSOCIATION started the second half of 2005 with the annual celebration in July of Diabetes Awareness Week, in cooperation with the Diabetes Center Philippines at the Iloilo city town square, Glorietta mall and Market Market! It was also at this time that the 15- and 30-second TV ad campaign "Deadly ang Diabetes" was shown daily from July 24 to 31 on the top networks GMA and ABS-CBN during their prime time shows. All over the Philippines, the different PDA chapters also had their celebrations of Diabetes Awareness Week, and a similar celebration focusing on diabetes and footcare happened on World Diabetes Day, Nov. 14. No matter what form they took, the activities were meant to increase the public's awareness about the dangers of diabetes to health.

Educating the person with diabetes about the importance of keeping excellent blood sugar control is the responsibility of physicians, nurses, dietitians and all health care personnel involved with diabetes. It is really worthwhile repeating our message over and over again. Our ever-present partners in the pharmaceutical industry are always willing to help. One good development too, is that on the community level some rural health centers, especially those under the Association of Municipal Health Officers and Physicians, have begun to conduct more awareness activities for their diabetic clients. The World Diabetes Foundation is also currently supporting a community diabetes project under the leadership of Dr. Francis Pasaporte in Iloilo.

Diabetes is certainly a deadly condition if not managed well. The Philippine Diabetes Association continues to link hands with other medical associations and the Department of Health through the program *Coalition on Healthy Lifestyle*. It is also an active partner of the WHO and the IDF-WPR in promoting the message of the Western Pacific Declaration on Diabetes. Through all these efforts it is my great hope that the predicted diabetes tsunami can be averted.

We have included in this issue stories of several real life heroes who wage a daily battle with their diabetes. May their lives be an encouragement to many of you.

Happy New Year to all!

Ma. Teresa Plata Que

MA. TERESA PLATA QUE, MD
ipque@diabetesphil.org

PHILIPPINE DIABETES ASSOCIATION



an affiliate society of the Philippine Medical Association (PMA)
an affiliate society of the Philippine College of Physicians (PCP)
a member of the International Diabetes Federation (IDF)

OFFICERS 2005-2006

Ma. Teresa Plata Que, MD
Chairman & President

Tommy S. Ty Willing, MD
Vice-Chairman & Vice-President

Editha Arceo-Dalisay, MD
Secretary

Roberto C. Mirasol, MD
Treasurer

BOARD OF DIRECTORS

Cynthia Halili-Manabat, MD
Elizabeth Paz-Pacheco, MD
Ma. Imelda Q. Cardino, RND
Sanirose S. Orbeta, MSRD, FADA
Ms. Marippee P. Genato (2005)
Ms. Evangeli A. De Jesus (2005)
Rosa Allyn G. Sy, MD
(Immediate Past President)

EDITORIAL BOARD

Editor Emeritus
Augusto D. Litonjua, MD

Editor-in-Chief
Ma. Teresa Plata-Que, MD

Assistant Editor
Patricia Gatbonton, MD

Contributors
Roberto C. Mirasol, MD
Allan S. Hernandez, MD
Florence Amorado, MD

Art Director
Pete F. Galvez

The **Diabetes Watch** (ISSN 1908-1227) is a publication of the Philippine Diabetes Association, Inc. with its corporate office located at Unit 25, Facilities Center, 548 Shaw Boulevard, Mandaluyong City, 1501
Tel. Nos. (632) 531-1278 • (632) 534-9559 • Fax No. (632) 531-1278
E-mail address: phildiab@pworld.net.ph • www.diabetesphil.org

Printed by Lizamen Printing Services

PDA CHAPTERS

Albay Chapter

President: JOSE C. COPE, MD
Dr. Amando D. Cope Member Hospital
Tabaco City 4511 • Tel. (830-1334)
Cell 0917-4692984

Baguio-Benguet Chapter

PrEsident: FRANCIS M. PIZARRO, MD
122 South Sanitary Camp, Baguio City
2600 • Tel. (074) 443-3668

Batangas Chapter

President: GLENN DIMATATAC, MD
Orchid St., Brgy. Homes Subd.,
Balintawak, Lipa City, Batangas 4217
Tel. (043) 757-2347

Bohol Chapter

President: LOURDES M. GALLEG0, MD
Dept. of Health Regional Health Office
No. 011 Gov. Celestino Gallares
Memorial Hospital
(Formerly Bohol Regional Hospital)
Tagbilaran City, Bohol 6300
Tel. (038) 411-3102 / 411-4504

Bulacan Chapter

President: MA. JOSEFA YANGA, MD
31 Hulo Meycauayan, Bulacan 3020
T/F. No.: 727-7690

Cagayan De Oro Chapter

President: ELVIS PABUA, MD
Sabal Doctors Hospital
Don Apolinar Velez St.,
Cagayan De Oro City 9000
Tel. (082) 272-7247

Cagayan Valley Chapter

President: MAGNOLIA B. REYES, MD
III Ugac extension Luna St.,
Highway Tuguegarao City, Cagayan
3500 • Tel. (078) 844-1571

Camarines Norte Chapter

President: PAUL LUIS G. PALENCIA, MD
OLLH Vinzons Avenue
Daet, Camarines Norte 4603

Tel. (054) 721-2664
Cell 0917-5312221
Fax. (054) 721- 2610

Camarines Sur Chapter

President: UBALDO ACAYAN, MD
San Isidro, Pili, Camarines Sur 4418
Tel. (054) 477-3281

Capiz/Roxas Chapter

President: CONCEPCION PIZARRO-
NOCHE • St. Anthony Hospital
Roxas City, Capiz 5800
Tel. (036) 621-1869

Cebu Chapter

President: MARIAN K. DENOPOL, MD
Vicente Sotto Memorial Medical Center
E. Rodriguez St., Cebu City 6000
Tel. (032) 235-4213
Fax. (032) 262- 2967

Davao Chapter

President: JUDY ANNE GATMIN, MD
18 2nd Cor. 4th St. Phase 3
Hillside Subd. Bajada, Davao City 8000
Tel. (082) 235-0872

Ilocos Sur Chapter

President: ESTRELLITA GARCIA-
BRINGAS, MD • Gabriela Silang
General Hospital Vigan, Ilocos Sur 2700
Cell 0916-269-7687

Iloilo Chapter

President: DOLORES OCTAVIANO, MD
Rm. 209 Piarre Louise Complex
St. Paul Hospital
General Luna St., Iloilo City 5000
Tel. (033) 337-8676

Laguna Chapter

President: ANTONIO S. CHUA, MD
Laguna Provincial Hospital
J. de Leon St., Sta. Cruz, Laguna 4009
Tel. (049) 808-1560
Cell: 09174574128
Fax. (049) 808- 1560

Leyte Chapter

President: AVITO SALINAS, MD
Divine Word University Hospital
Tacloban City, Leyte 6500
Tel. (053) 321-4551
Fax. (053) 321- 2309

Negros Occidental Chapter

President: MARIAN JOYCE
GARCIA-CO, MD
Diabetes Clinic & Accu-Check Clinical
Laboratory Medical Lane
21st Street, Bacolod City,
Negros Occidental 6100
Tel. (034) 434 1296

Nueva Ecija Chapter

President: RONALDO DE RAMOS, MD
Emmanuel Specialty Clinic
Natividad St., Cabiao,
Nueva Ecija 3107
T/F. No. (044) 486-3294

Palawan Chapter

President: BELINDA G. PALAO, MD
157-C Manalo Ext.,
Puerto Princesa City
Palawan 5300
Tel. (048) 434-5651
Fax. (048) 433- 6137

Pasig Chapter

President: NICK VILLATUYA, MD
8 West Capitol Drive
Kapitolyo, Pasig City 1603
Tel.(02) 633-2389 / 632-9461

Sorsogon Chapter

President: MA. LIDUVINA F. DORION,
MD • Sorsogon Provincial Health Office
4700 Macabog, Sorsogon City
Tel. (056) 211-1032

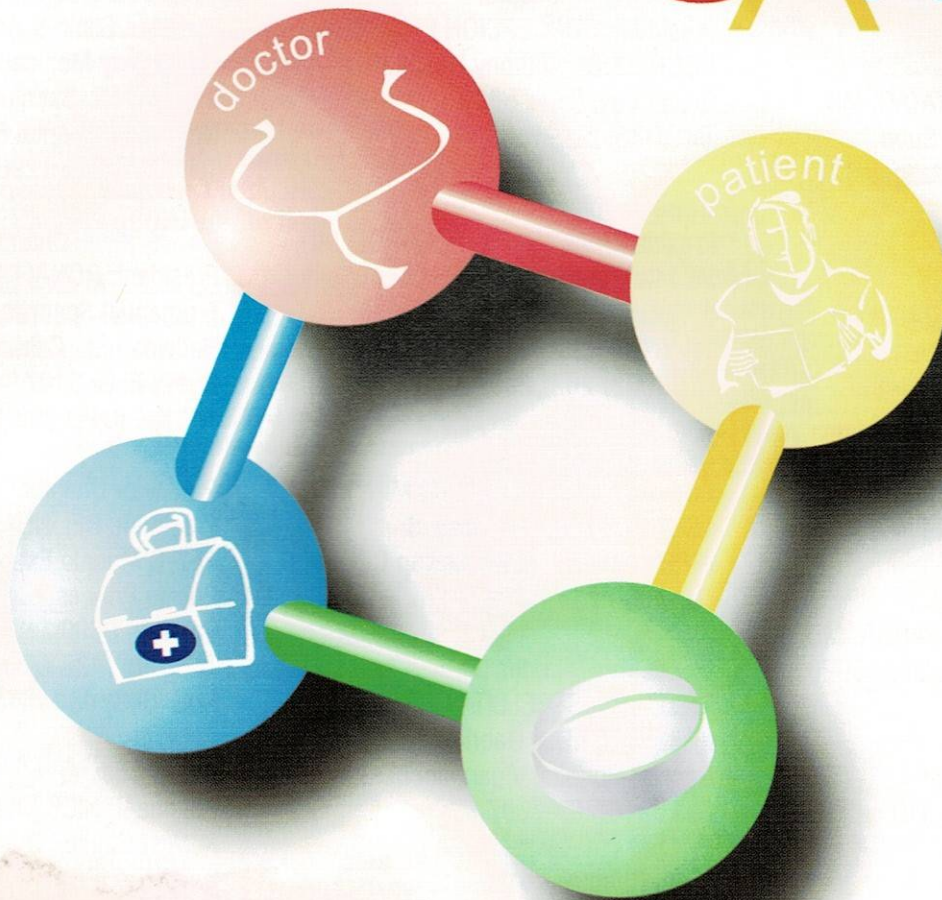
Zamboanga Chapter

President: FATIMA IBBA-TIU, MD
Diabetes Clinic, Ultra Cinema Bldg.,
San Jose Road, Zamboanga City 7090
Tel. (062) 992-2788

METFORMIN HCl

FORNIDD

CARES



*Provides outstanding
diabetes control
Alone or in combination*



**BOOTS
HEALTHCARE**

The Boots Company
(Philippines, Inc.)

MEANDERINGS

Augusto D. Litonjua, M.D. • Emeritus Editor



SMBG Key to the prevention of diabetic complications

Diabetes affects a large proportion of the population both nationally and worldwide and its prevalence is increasing. This disease is associated with complications of the small and big blood vessels, called microvascular and macrovascular complications, respectively. Strategies that decrease the exposure of the body organs to high blood sugar have been shown to decrease the complications of diabetes. Thus, regular assessment of the blood sugar levels is an integral component for optimizing glycemic control.

Blood sugar control is usually done in the clinics through estimation of the fasting and postprandial blood sugar levels which is done generally every 1-2 months at each clinic visit. This is usually supplemented by estimation of the glycated hemoglobin (A1c) every 3-6 months. However, in the vast majority of patients, these have been proven to be inadequate, and optimizing glycemic control is not achieved.

A reevaluation of our approach to glucose management is needed, because strict control of the blood glucose has been shown to improve clinical outcomes and quality of life in people with diabetes, as shown by studies which tightly control the fasting blood glucose and postprandial (after meals) blood

glucose levels.

How then can we reach our targets for tight glucose control, if the routine estimation of the fasting and postprandial blood sugar at each clinical visit is inadequate, even if supplemented by A1c tests? The answer lies in the adoption by all patients with diabetes of SMBG which stands for Self Monitoring of Blood Glucose. This is a procedure where patients test their own blood sugars several times a day with frequencies that will be adopted through interaction between patient and physician. Monitoring can be done daily or every other day in the beginning, then done at less frequent intervals thereafter once blood sugar control is improving. But, it must be emphasized that the practice of monitoring only the fasting blood glucose is an inadequate way of optimizing glucose control.

Both A1c and SMBG are essential for assessing glycemic control, and each presents a different view of the glycemic picture.

A1c assesses the long term glycemic control (the past 3-4 months). It reflects the combination of preprandial (before meals) and postprandial (after meals) glucose levels. It is a predictor of diabetes complications!

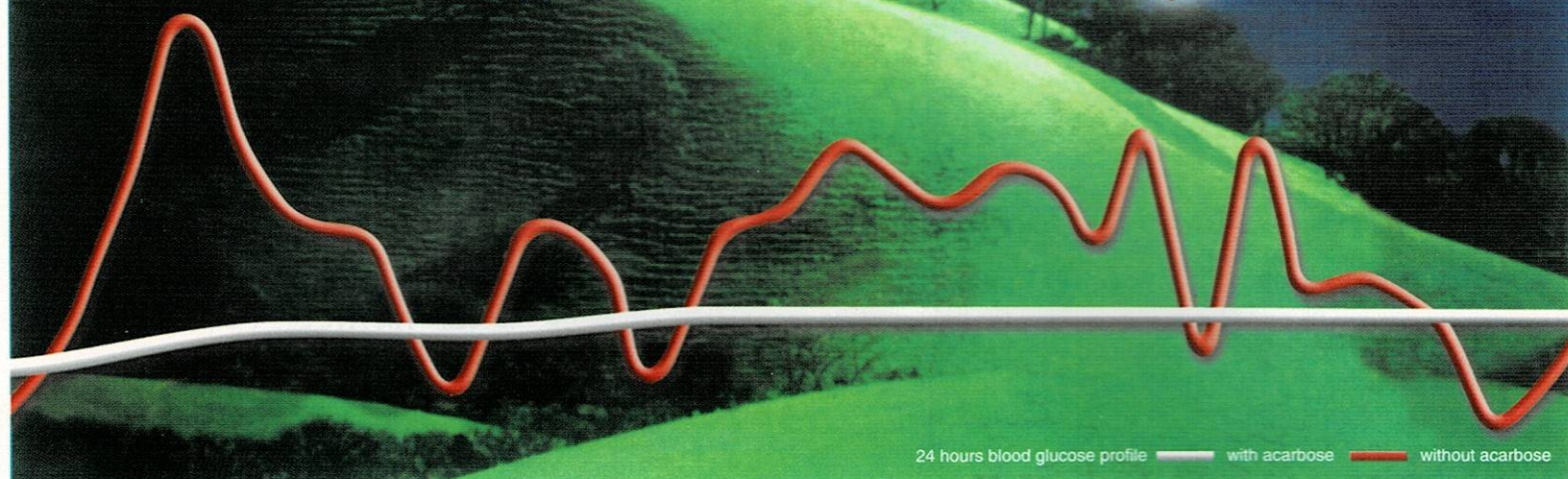
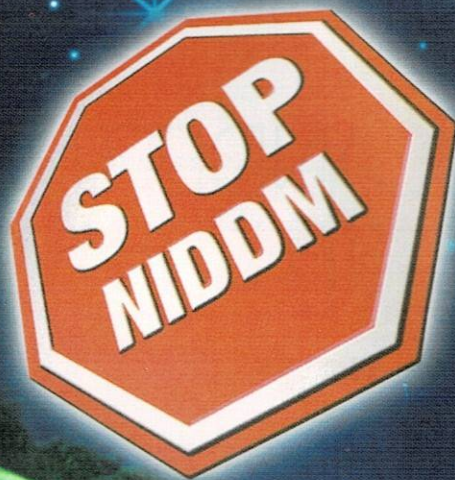
SMBG is required to determine the recent patterns of the preprandial and postprandial glucose levels. The A1c and SMBG, therefore, complement each other. Additionally, SMBG identifies hypoglycemic (low blood sugar levels) and postprandial hyper-glycemic excursions (blood glucose variability after meals).

Self monitoring of the blood sugars should be recommended to all people with diabetes as an integral part of an over-all diabetes management program. This statement is supported by organizations which deal with diabetes mellitus, e.g., International Diabetes Federation, American Diabetes Association, American Association of Clinical Endocrinologists and the Canadian Diabetes Association. Here in the Philippines, this statement is also supported (through a referendum to their respective heads) by the Philippine Diabetes Association, Philippine Society of Endocrinology and Metabolism, the Institute for the Study of Diabetes and the Diabetes Center Philippines.

Each patient therefore must be willing to adopt SMBG if only to reduce the complications due to inadequate control of their blood sugars. ■

The Effective Therapy for Type 2 Diabetes

The First to Prove CV Risk Reduction



24 hours blood glucose profile — with acarbose — without acarbose

Acarbose Glucobay®

- ▶ The **first** and **only** oral antidiabetic agent with proven reduction of CV events in dysglycaemia² (IGT) and diabetes³
- ▶ Reduces fasting blood glucose, provides long-term glycaemic control¹, controls postprandial glucose and HbA1c, and increases insulin sensitivity⁵
- ▶ Prevents the onset of diabetes in subjects at risk^{4,6}

www.glucobay.com • www.cardio.bayer.com • www.stop-niddm.com • www.diabeteshighlights.com

¹Mertes G Diabetes Research and Clinical Practice 52 (2001) 193-204; ²Chiasson J-L et al. JAMA 290 (2003) 486-494; ³Hanefeld M et al. Eur Heart Journal 25 (2004) 10-16; ⁴Chiasson J-L et al. Lancet 359 (2002) 2072-77; ⁵Menelly GS et al. Diabetes Care 23 (2000) 1162; ⁶Yang WY et al. Chin J Endocrinol Metabol 17 (2001) 131-136

Glucobay®. Acarbose: tablets 50, 100mg. **Packs:** Country specific. **Indications:** Diabetes mellitus in combination with diet. **Dosage:** According to individual response. Start with 50 mg od increased to 100 mg tid. Dosage increase interval 1-2 or more weeks. If afternoon blood glucose levels are low, skip midday dose. Swallow tablets immediately before meals or chew at meal beginning. **Contraindications:** hypersensitivity to acarbose, pregnancy, lactation. Children and adolescents, who are less than 18 years of age. **Precautions:** Caution to patients with chronic digestion, absorption disorders and conditions aggravated by increased intestinal gas formation e.g. large hernias, constrictions and ulcers of large intestines. Foodstuffs containing sugar may lead to intestinal discomfort and diarrhoea. In case of hypoglycemia use dextrose (not sucrose). **Interactions:** Dose of antidiabetic therapy may be reduced on addition to Glucobay®. Antacids, cholestyramine, intestinal absorbents and digestive enzymes may reduce its effect (avoid simultaneous intake). **Side effects:** They are dose and substrate-related and generally subside with continued treatment. They can be minimized by adherence to diabetic diet and avoidance of sucrose-containing foodstuffs. Feeling of fullness, abdominal distension, flatulence, soft stools and diarrhoea. Individual cases of asymptomatic transaminase increase disappearing completely after discontinuation of therapy. **Full prescribing information available by:** Bayer HealthCare AG, PH-GSM Regional Marketing Asia-Pacific, D051368 Leverkusen, Germany.



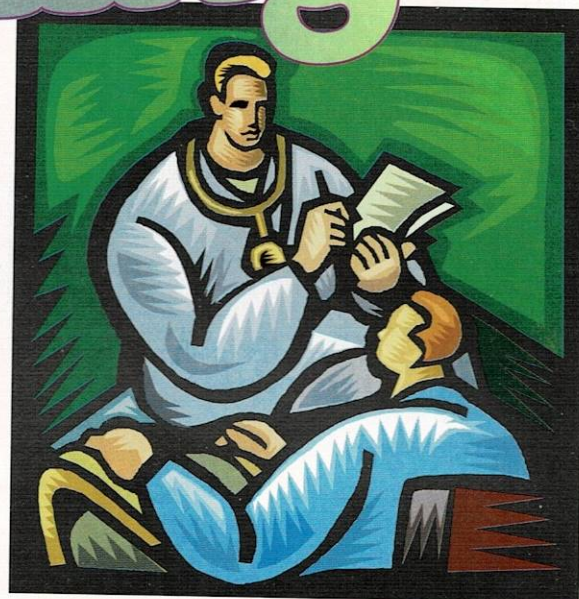
Bayer HealthCare

Bayer Philippines, Inc.
Canlubang Industrial Estate
Calamba, Laguna 4028
Tel. No.: (049) 549-7375

Everything

you always wanted
to know **about diabetes...**
(but were afraid to ask!)

BY ROBERTO C. MIRASOL, MD



RECENT STUDIES have shown that Type 2 Diabetes is now **preventable**.

Landmark studies done in China, Finland, Canada, U.S.A., have all shown that we can indeed prevent diabetes. Diabetes Watch will answer your questions regarding this hot topic. Read on and learn more!

My fasting blood sugar is 120 mg/dl. My doctor said I have impaired fasting glucose (IFG) or pre-diabetes.

What exactly is IFG or pre-diabetes? The normal blood sugar is less than 100 mg/dl. To diagnose diabetes, fasting blood sugar should be greater than 125mg/dl. There is a window between 100 125 mg/dl. This is IFG or pre-diabetes.

Why is it important to recognize pre-diabetes?

In the Diabetes Prevention Program done by the National Institutes of Health, it was found out that 11% of people with pre-diabetes developed diabetes each year. It is in this

stage where we can prevent diabetes and reverse the progression to diabetes. It is also at this stage where they have found an increased risk for heart disease. Hence, we need to aggressively look for these cases. If you are overweight, have a strong family history of diabetes, a history of large babies, dyslipidemia (high cholesterol), and high blood pressure you need a blood test.

What blood test will I need?

Your doctor could recommend Fasting Plasma Glucose (FPG) or an Oral Glucose Tolerance Test (OGTT). The FPG requires fasting for 8- 10 hours. The OGTT is a more tedious test. This will require three blood extractions- fasting, one and two-hour post 75 grams glucose load.

Will they both give the same information? Yes. I have diabetes in the family. My weight has been progressively

increasing over a span of four months. Is it still possible for me to prevent diabetes? Definitely! There are several ways, which you can do. You need to lose 5-10% of your present weight. You have to exercise 30 minutes, most days of the week. Eat less saturated fat. It has been shown in several studies that when you do this you decrease risk of progression to diabetes by as much as 58%. This has been duplicated in several other studies.

Do I need to take in tablets to prevent becoming a diabetic? Only if diet and exercise fails. There are three drugs which have been studied Metformin, Acarbose and Orlistat. These drugs have been shown to decrease progression to Type 2 Diabetes. However, diet and exercise have to be fully exhausted before taking these drugs.

We welcome your comments and suggestions. Please fax at 5311278 (Philippine Diabetes Association) ■

Olivia Tan's Secret Diabetes Management Recipe:



Discipline
++Patience
+Diligence
+A Devoted Husband

BY CORNELIUS MONDOY

It is half past noon and patients at the National Kidney Transplant Institute's Dialysis Center are doing calisthenics. Olivia Tan is at the far corner of the room raising her right leg.

"One, two, three, four," a female intern in the middle of the room says aloud. Surprisingly, Olivia is able to keep up despite her age and condition. She has been suffering from diabetes for more than 30 years,

and because diabetes is a degenerative disease involving impurities in the blood, its effects and complications are wide-ranging. Olivia has been diagnosed with a heart problem, and her eyes, lungs and kidneys have begun to deteriorate. But like Energizer bunny, Olivia keeps going on.

Her source of strength for 39 years comes into the room a few minutes later. "She has to eat. You have to wait for a while," Narciso Tan says. "She

must not miss her meals. Otherwise, she might become hypoglycemic."

Narciso is not a doctor, but the sureness of his words when it comes to diabetes can make one mistake him as a specialist. An engineer by profession, he has a knack for details and numbers.

"It all started when she gave birth to our third child 32 years ago," he says, recounting the moment when they discovered diabetes. Olivia apparently

got the disease through heredity and its onset caught them by surprise – the couple had been very religious with doctor visits and health check ups.

"We thought that regular visits to the doctor can keep diseases like diabetes away," Narciso shares. But doctors are just one part of health's equation. Patients also have their own part to do. As suggested by Olivia's doctor, Narciso has taken upon himself to know everything about the disease. Soon, disbelief gave way to total

Many people don't know that diabetes is a **very manageable** disease.

their medical **expenses have gone down dramatically** ever since he focused on managing his wife's diabetes.

acceptance and absolute resolve to beat the disease in its own game. Narciso resigned from his business venture to devote his time to managing diabetes.

"Many people don't know that diabetes is a very manageable disease. If you're meticulous, careful and patient enough to monitor blood sugar levels, you can keep its effects at a minimum," Narciso shares.

He began his study of diabetes five years ago when his wife developed renal complications due to diabetes. Olivia's endocrinologist taught Narciso how to measure blood sugar levels, plot them in a graph, and what food should Olivia take to keep her sugar count normal. With the doctor's guidance, Narciso soon saw that diabetes is essentially a balancing act that patients, with the help of their loved ones, can achieve.

He then shows proof of his claim. Narciso fishes a long folder from a bag containing meticulously kept records of his wife's condition, including medical expenses and carefully plotted graphs of Olivia's blood sugar levels. Her normal sugar level was pegged at seven. With that

data, he has tried to keep his wife's blood sugar at seven or below, which is not easy as Narciso himself confesses.

"Managing diabetes requires a lot of discipline, patience and diligence," he says. "If my wife is low on blood sugar, I give her something sweet. If she's hyperglycemic, I keep the sweets off. I also make sure that all the food she eats are clean: no salt, no vetsin, and no preservatives."

Narciso has been so successful in his management of diabetes that his wife has not seen her endocrinologist for almost a year. Despite Olivia's already present complications, she has been healthy and happy on the whole.

What's more, Narciso reports, their medical expenses have gone down dramatically ever since he really focused on managing his wife's diabetes.

"In 2002, we spent P865,000 on doctor consultations, medicine and hospital confinement. In 2003, it went to P864,000. It was not much but it was still a decrease. Last year, we were able to bring it down to P561,000," Narciso says, beaming

with pride.

He attributes the decrease to less hospital confinements and medicine purchases. "My wife's blood sugar level has been normal for almost a year now," Narciso says. "Thanks to careful observation and maintenance, we have been able to avoid hospitalization expenses. We don't even buy so many medicines anymore."

However, Narciso remains vigilant. After all, the war against diabetes is an ongoing crusade. Olivia is fortunate to have a devoted husband like Narciso on her side.

For a brief moment, Narciso looks back to the moment they discovered Olivia's diabetes. Had he studied diabetes earlier, they would have been able to avoid all the expenses they've incurred. But that's how wisdom is earned through hindsight.

His advice to diabetics: "Know everything about the disease as early as you can. Doctors can only do so much. Having your own personal knowledge about diabetes is like winning half of the battle." ■

Nothing is sweeter than love, nothing stronger, nothing higher, nothing wider, nothing more pleasant, nothing fuller or better in heaven or on earth.... A lover flies, runs, rejoices.... Love often knows no limits but is fervent beyond measure. Love feels no burden, thinks nothing of labors, attempts what is above its strength, pleads no excuse of impossibility.... Though wearied, it is not tired; though pressed, it is not straitened; though alarmed, it is not confounded; but as a lively flame and burning torch, it forces its way upwards and passes securely through all.

Thomas à Kempis (c. 1380-1471)



"For better or for worse, in sickness and in health... Let not diabetes do us part ..."

By Florence Amorado-Santos, MD

Trials and regrets can be a positive relational force.



When the Editor asked me to write a human interest story of any of my patients with diabetes complications, I actually had a long list of candidates for the article. I have patients who already had leg amputations, those who are already on dialysis and those who even had repeated heart attacks. But I happened to remember a couple who are both diabetic and have been regularly seeing me for the past few months...I told myself, "Hmm, why not write a husband and wife story. It could be twice as interesting, won't it?"

Having a diabetic patient in the household entails effort from the immediate relatives, in terms of financial, emotional and psychological support. Can you imagine if both of your parents who are supposed to be the source of familial strength in every aspect are the ones suffering from this debilitating disease?

Let us hear the life story of Juanito and Gloria Zara and their continuing battle with diabetes mellitus....

Juanito is 50 years old and had a cerebrovascular accident (stroke) in 1992 when he was 38 years old (eight years after he got married to Gloria). He had weakness of his right arm and leg which had a big impact on his daily routine being the proprietor of several bakeries in Taysan, Batangas. However, feeling the need that he had to continue all

the responsibilities for his family, his stroke did not hinder him from resuming all the necessary daily tasks. He proudly recalled that he could even ride his motorbike with sidecar around the town to distribute bread products to his bakery outlets. Nothing was really changed. Until 1996, when he suddenly experienced blurring of vision. Thinking that it was just an ordinary blurring from aging, he ignored it for awhile until one of his eyes nearly went blind. When he consulted, he was told that he is suffering from diabetic retinopathy, one of the complications of poorly controlled blood sugar. Much to his surprise, he never knew he had diabetes all along.

Looking back, he denied any symptoms of frequent urination, frequent thirst but admitted he had been polyphagic which he attributed to his heavy daily chores that would usually require him to eat a lot during meals. He was obese to start with. (I even joked it was probably the bakery business with all the sugar and bread flour day in and day out that lead to his being diabetic.) After the stroke and now diagnosed to have diabetes with the eye complication, it was at this point that Jaime (as his friends call him) felt he was not as confident as he was before. With poor eyesight, a lot of things have changed. His ordeal did not end here, in 1998 at 43 years old, he had his first episode of acute myocardial infarction (heart attack).

He had been rushed to the hospital at least three times for difficulty of breathing due to congestive heart failure. Just recently, when he came in to my clinic, his left eye had a patch and when I asked him why, he told me his ophthalmologist told him that he was having weakness of his eye muscles leading to diplopia (being cross-eyed) which is also a complication of diabetes. At present, he had undergone six laser treatments to stop the retinal hemorrhages. As I look at him walk in and out of my clinic, carrying his laboratory results in a plastic envelope, I couldn't help but admire how a man of his age, supposedly in his prime, already had survived all these challenges brought by the complications of different diseases.

Let us take a look at the story of the better half...

Gloria (Galo to her friends) related that it was in 1989, when she was 27 years old, when by chance, during a free blood glucose screening in their office was told she had an elevated result. She was advised diet and exercise (she was already obese that time), but carefree as she was and since she was asymptomatic, she did not heed this advise. When she got pregnant with her third child, she could recall there was no mention of her being diabetic nor were there any insulin injections. But when she gave birth, it was an astounding 10-pounder baby boy who

had hypoglycemia after being delivered and was in the incubator for one week!! (Can you imagine a macrosomic baby inside the incubator? Side by side with all those tiny preemies?) It was only 2 years after the delivery of her third child that Galo sought consultation and started to take medications for diabetes, which she confessed were taken irregularly.

A few years after, Galo noticed that her eyesight was deteriorating. There was no eye pain, just blurring of vision which was different from the blurring which her husband had experienced. Hers was gradual yet more complex when she was evaluated by her ophthalmologist. She was told it was the optic nerve (the main branch of the eye arteries), which was affected. It was undergoing atrophy and this condition was irreversible and will not respond even to eye surgery unlike the other eye complications of diabetes. Knowing this, it brought Gloria severe depression. There was no hope for her eyes, not even the modern technology of laser surgery. Afterwards, she started having uncontrolled hypertension and she could hardly ambulate around the house without a cane to guide her.

Looking at the couple as one ...

Jaime and Galo were blessed with three boys. Glenn Joseph, 19 years old an Industrial Engineering student at the University of the Philippines in Los Banos. James Matthew, 18 years old, Nursing student at Lyceum of Batangas and Juanito, 14 years old, 3rd year High School student in Taysan High School. When asked about their sons, both parents proudly said that despite their conditions, they are very lucky to have responsible children. Jaime and Galo nurtured their children in a simple way of life and true enough, young as they are, these kids are aware of their parents' incapacity physically and would readily

volunteer helping in their family business whenever they are on vacation (they are being paid 1,500 pesos per month during summer vacation for helping in their bakery).

What were the changes in their lives before and after having all the complications of diabetes?

Jaime said he used to be fond of singing in Videoke bars, but now, that love of hitting high notes is gone. What he misses the most is going to their farm which used to be his refuge after a weeklong of work at the bakeries. But due to poor eyesight, he now contents himself by sending someone to look after his fruit trees and small nipa hut. He also couldn't drive anymore. While with Galo, she feels frustrated because she used to do the bookkeeping for their business (she was a former Auditor at the Commission on Audit Central Office). But now, she can't even read the numbers on the calculator. She was also an avid reader before she lost her eyesight, from pocketbooks to newspapers to magazines, she just loved to read. She even can't watch the television and would just entertain herself by listening to the voices on TV especially the tele-series.

When asked what their regrets are if there are any ...

They both responded that only if they were both health conscious many years ago, probably their life will be much different. Jaime admitted he used to be a heavy smoker and heavy alcohol drinker. While Galo said if only she took her diabetes seriously before by taking her medications, it could have been a different story. Both of them consider that the eye complication of diabetes really hit them hard above all. It had totally changed their lives.

For them, if diabetes awareness before was as intense as these days, probably they could have been more

vigilant in monitoring their health. But because they were too preoccupied with their business when they were younger, they took their health for granted. Galo was even misty-eyed when she said that even if it would cost her a fortune to bring back her eyesight, she would be willing to take the gamble. But, unfortunately, nothing can bring it back.

How do they look at themselves ten years from now?

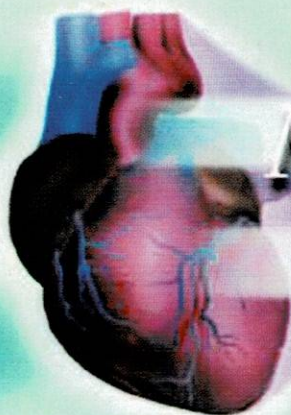
They both hope that all their children would have finished their schooling which they consider would be their biggest accomplishment. With the high cost of living nowadays and having to spend 1,200 pesos everyday for all their medications, they still hope they would be able to sustain the needs of their three sons until they are all stable. With the continuous drop in the economy and the skyrocketing prices of medications, both of them hope that they could still afford the long list of medicines which they have to take everyday. They said even if they are only in their midlife, they couldn't make other long term plans since they do not know until when and where all these diabetes complications would take them.

As I put my interview with Jaime and Galo to a close, I couldn't help from thinking that it is indeed true that marriage and sickness have three things in common: acceptance, sacrifice and keeping Faith alive.

Jaime nor Galo may not be able to read by themselves this article which I have written but maybe one of their sons can read this to them. Their lives offer good lessons to the other diabetics out there. They may not be a perfect couple but their strength and patience is a concrete example of how one should hold on and continue the fight to conquer the complications of diabetes. ■

 **Faith is a refusal to panic.** D. Martyn Lloyd Jones (1899-1981)

Leaders In Cardiovascular and Metabolic Care



5-mg and 10 mg tablets



**AMLODIPINE
BESYLATE**
NORVASC®



**ATORVASTATIN
CALCIUM**
LIPITOR®
10 mg, 20 mg, 40 mg, 80 mg Tablets



Diltiazem
Dilzem® 30/60/90/180mg

GLIPIZIDE
MINIDIAB®



Spironolactone
Aldactone® 25 mg OD



QUINAPRIL HCl
ACCUPRIL® Once-a-day
5 mg/10 mg/20 mg



Spironolactone/Butizide
Aldazide®

**QUINAPRIL/
HYDROCHLOROTHIAZIDE**
ACCUZIDE® 10 mg/12.5 mg

Gemfibrozil
Lopid® 600mg OD

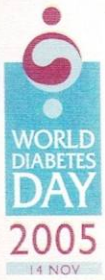
CARDIO-CORE
Global Leaders in Cardiovascular Care



Pfizer, Inc.
235 Avenue of the Americas
New York, NY 10027
For more information, visit
www.pfizer.com

**METABOLIC
CARE**

*Trademark of Pfizer, Inc. NY NY Reg. Phil. Pat Off.



WORLD DIABETES DAY 2005

Put Feet First Prevent Amputations

BY MA. TERESA P. QUE, MD

Every thirty seconds a leg is lost to diabetes somewhere in the world.

*The time to act is **now!***



About 50% of patients who undergo a major amputation die within five years of their operation.

In some hospitals in the Philippines, 7 out of 10 patients admitted for diabetic foot problems end up with a lower limb amputation. Many of these patients come with grossly infected foot ulcers and many of them do not know they have diabetes. Most of these patients are poor, lack family support, are elderly and have been diabetic for a long time.

After a major amputation, walking speed is greatly reduced and more effort is required to ambulate, thereby taxing the heart and lungs of elderly amputees. Prostheses and rehabilitation cost a lot of money and many patients become wheelchair bound and or bedridden. Amputations are life-threatening and may involve lifelong dependence upon the help of others, inability to work and much misery. About 50% of patients who undergo a major amputation die within five years of their operation.

Leg amputations and foot complications are a major global public health problem. Over one million amputations resulting from diabetes are carried out every year, a figure that is unnecessarily high. Poorly controlled diabetes of long duration can result in lack of sensation due to nerve damage and/or poor circulation in the legs and feet. Trauma to the feet complicated by infection result in the spiraling cascade of factors leading to a lower limb amputation. Most of these amputations can be avoided through targeted prevention and improved care.

Diabetes currently affects 194 million people worldwide and is expected to reach 253 million by the

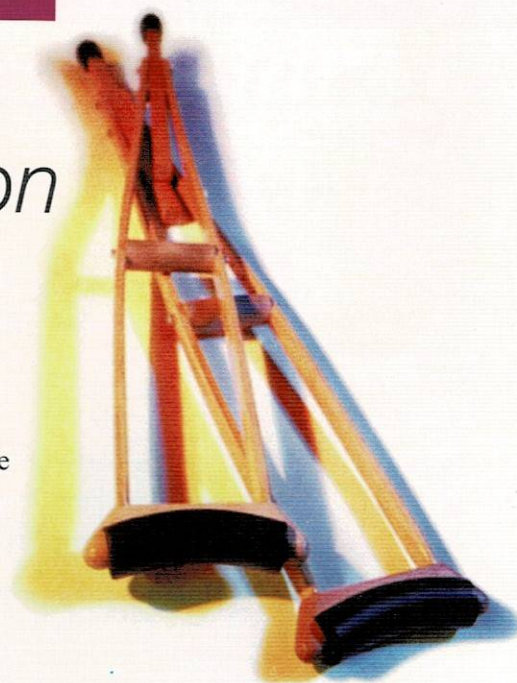
year 2025, with most of the massive burden falling in developing countries. If not managed properly diabetes leads to complications such as heart attack, brain attack or stroke, limb amputations, kidney failure, and impotence. If appropriate action is not taken, these complications will proportionately increase imposing huge burdens on governments and economies.

The International Diabetes Federation (IDF), which counts the Philippine Diabetes Association among its members, the International Working Group on the Diabetic Foot (IWGDF) and the World Health Organization (WHO) have joined forces in a year long campaign to demand that action is taken to reduce the unacceptable number of amputations. The campaign highlights the need for urgent action to bring about improvements in foot care for the nearly 200 million people with diabetes. With the slogan "Put Feet First Prevent Amputations" we want to emphasize that prevention can be achieved. World Diabetes Day is the primary global awareness campaign of the diabetes world. While the theme campaigns last the whole year, the day itself is celebrated on November 14. The campaign is aimed at people with diabetes and those in a position to influence and improve their healthcare.

Can the number of amputations be significantly reduced?

The number of amputations can be significantly reduced with relatively low investment by well organized foot care teams who stress the importance of good diabetes control among well informed and empowered patients. Experts estimate that a reduction of up to 85% can be achieved through the adoption and implementation of the existing international guidelines. These guidelines call for the identification of the people at risk of diabetic foot complications, regular foot examinations, improved education in self care for people with diabetes, and appropriate footwear.

Early detection and early intervention are key to improving the outcomes for people with diabetic foot problems and to bringing about the much needed reduction in mortality rates. World Diabetes Day 2005 brings together the entire global diabetes community to alert policy makers and healthcare providers of the need to reduce the huge burden of diabetes and the diabetic foot in particular. **The time to act is now!** ■

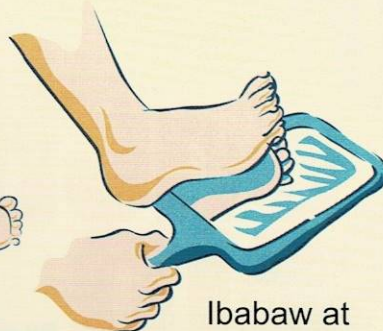


ANG WASTONG PANGANGALAGA NG PAA NG ISANG DIABETICO

Suriin ang paa!



Araw-araw



Ibabaw at Talampakan



Magpatulong

Tingnan ang pagitan ng mga daliri!

- Sugat
- Paltos
- Maga



- Tuyong balat
- Bitak



Kumunsulta kung may problema.



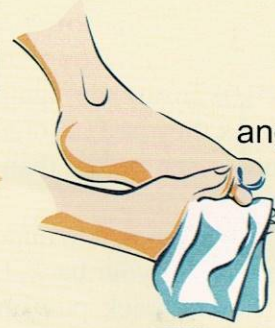
Wastong pangangalaga sa balat!



Tingnan ang init ng tubig.



Punasan ng tuyong tuwalya.



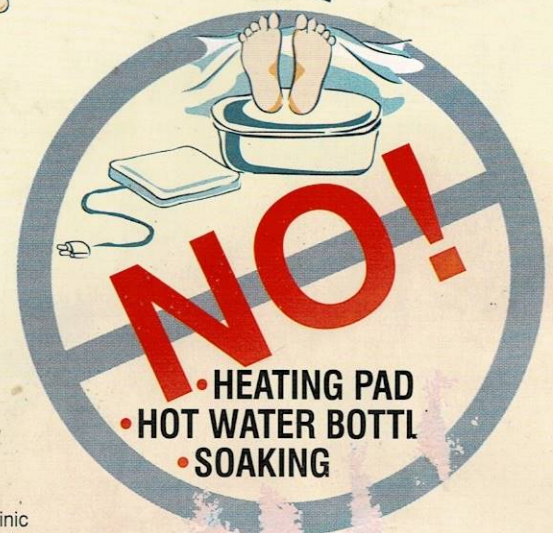
Patuyuin ang pagitan ng daliri.



Gumamit ng lotion.



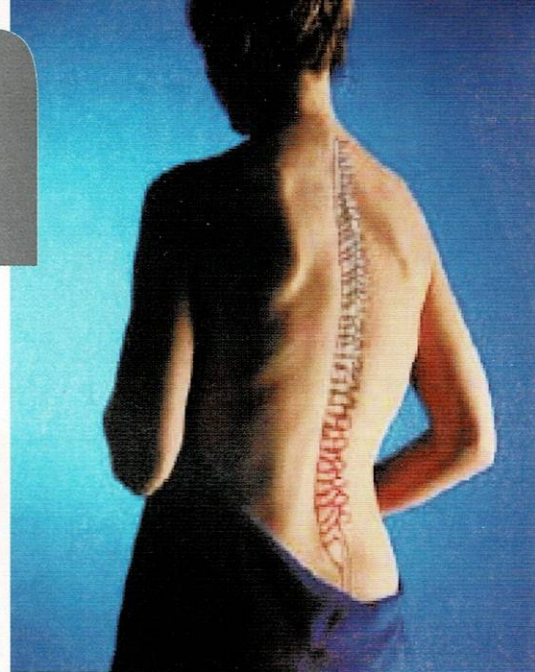
Magsuot ng medyas kung malamig ang pakiramdam ng paa.



- HEATING PAD
- HOT WATER BOTTL
- SOAKING



The Truth About Low Back Pain



By Cynthia Roque Cacho, RPT

LOW BACK PAIN is one of the most common syndromes affecting many adults. Early and accurate diagnosis is essential in proper treatment, including rehabilitation. Treating low back pain is a group effort composed of the medical practitioner, employer, family—and the patient himself—the most important member of the team.

There are many treatments and procedure in treating low back pain. But still, protecting your back is the best insurance against back injury. As they say, an ounce of prevention is far better than a pound of cure.

It is important for you to understand the structure of your back, the risk factors to low back pain and proper body mechanics.

Your back is made up of many bones constructed like a pillar supported by strong muscles that don't tire easily, which keep you upright against gravity and maintain the three natural curves of your back. The abdominal muscles also support your back. Proper movement of the pelvis and symmetry in leg length are all essential for the normal alignment of your back bones. Having mentioned this, it is obvious that the first line of defense against low back pain is to do simple

abdominal strengthening exercises and stretching of the low back and leg muscles.

Risk factors to low back pain are those positions or activities which make back pain more likely.

A posture that doesn't maintain the natural curves of your back such as lifting a heavy object with your back bowed, a slouched sitting position, and bending from the waist are all examples of activities which put you at risk to developing low back pain.

Obesity, jerking and twisting movements and lack of proper rest are added risk factors. Even smoking is a risk factor, especially if you smoke more than one pack a week, because it can lead to chronic coughing and put pressure on your back bones. Anxiety and depression are also risk factors because people tend to assume certain postures when they have these attacks.

Proper body mechanics is the way you move your body and back. It is important for us to always remember to practice good body mechanics to protect our back from any injury. Here are some tips for proper body mechanics:

When lifting, always keep the load close to your body, bend your

hips and knees, lift with your legs, tighten your abdominal muscles, maintain the three natural curves of your back and avoid twisting.

When twisting is necessary, kneel down on one knee, maintain the three curves of your back, position yourself so that you have good leverage, use your arms and legs to do the work and not your back.

When reaching for something above your head, use a stool, test the weight of the load before lifting by pushing up one corner, let your arms and legs do the work, tighten your stomach as you lift.

When pushing or pulling, stay close to the load, push rather than pull, use both arms, tighten your stomach.

When bending, kneel down on one knee, maintain good posture, bend hips and knees, not the back; when leaning forward move your whole body, not just the arms.

Now that you know how your back would like to be treated, think about your everyday activities that may cause low back pain and try to avoid them. Everything is still up to you.

So keep your back in mind always while you sit, stand, lift and carry. And remember to practice good body mechanics. ■

Simple Ways to Prevent the Onset of Low Back Pain*

Recommended



Relieve strain by sitting well forward; flatten back by tightening abdominal muscles; and cross knees.



Use of footrest relieves swayback; have knees higher than hips.



Correct way to sit while driving is close to pedals. Always use a seat belt.



Keep neck and back in as straight a line as possible with the spine. Bend forward from the hips.

Caution



TV slump leads to "dowager's hump"; strains neck and shoulders.



If chair is too high, swayback is increased.



Driver's seat too far from pedals emphasizes curve in lower back.



Forward thrusting strains muscles of the neck and head.

Recommended



Use of a footrest relieves swayback.



Bend the knees and hips, not the waist.



Hold heavy objects close to you.



Never bend over without bending the knees.

Caution



Not this way.



Not this way.



Not this way.



Not this way.

Recommended



Lying on side, with knees bent, effectively flattens the back. Flat pillow may be used to support the neck, especially if the shoulders are broad.



Sleeping on back is restful and correct when knees are properly supported.



Raise the foot of the mattress eight inches to discourage sleeping on the abdomen.

Caution



Lying flat on back makes swayback worse.



Use of high pillow strains neck, arms, shoulders.



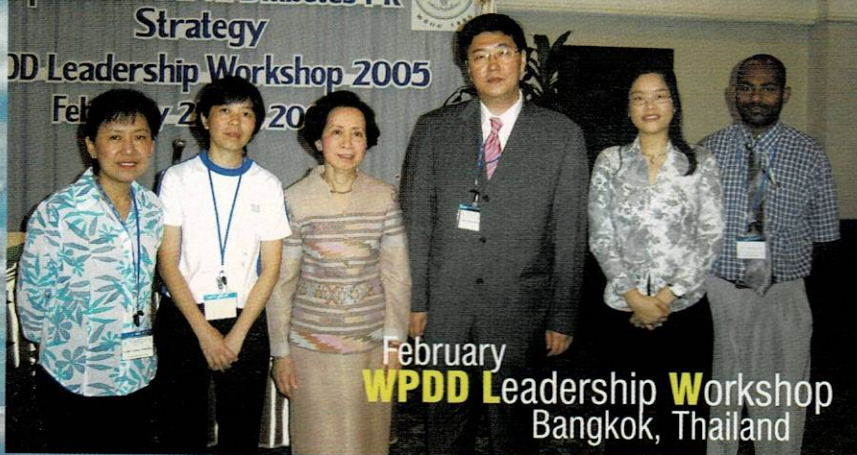
Sleeping face down exaggerates swayback, strains neck and shoulders.

* Courtesy of National Kidney and Transplant Institute • Rehabilitation Medicine Department



PDA 2005 *ON THE MOVE*

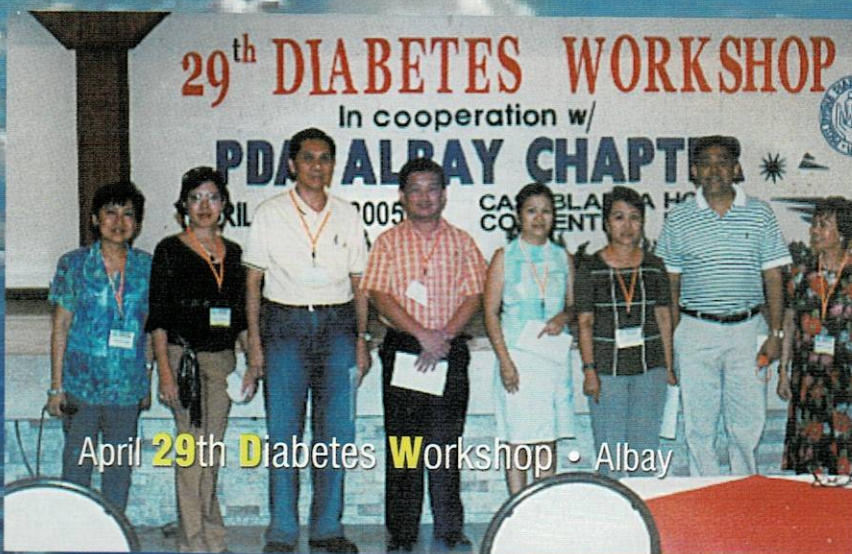
Implementation on Diabetes PR
Strategy
DD Leadership Workshop 2005
February 2005



February
WPDD Leadership **W**orkshop
Bangkok, Thailand



December
ASEAN Federation of E



April **29th** Diabetes **W**orkshop • Albay



December
Batangas **C**hapter
president,
Dr. Glen Dimatatac
receives
PDA Chapter of
The **Y**ear **A**ward

November **L**ay **A**nnual **C**onvention • Century Park Hotel





February
Lakad Puso
Quezon City



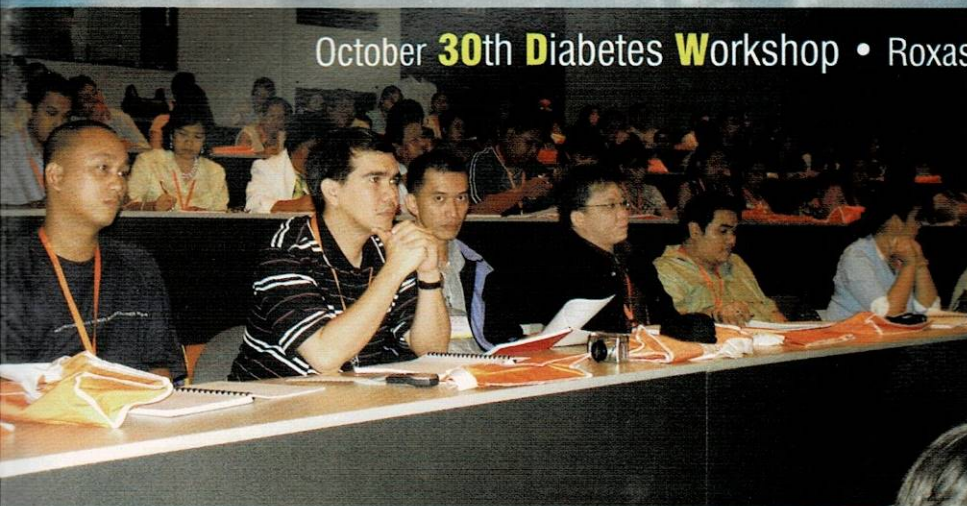
July **PDA Chapter Presidents' Meeting** • Richmond Hotel



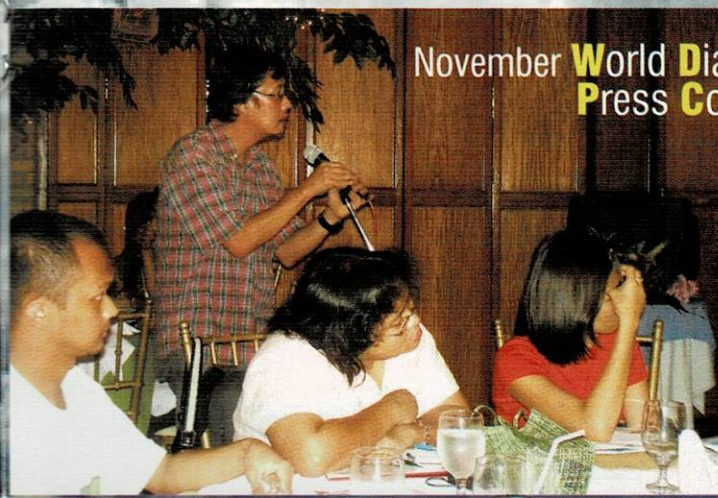
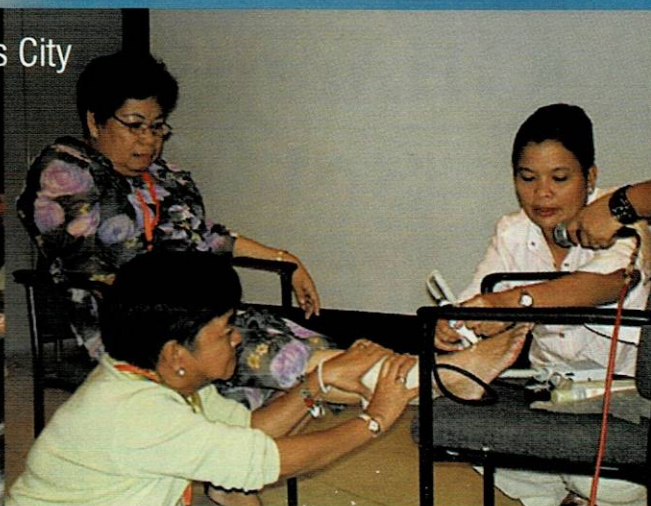
Endocrine **Societies Congress**



July
Diabetes Awareness Week



October **30th Diabetes Workshop** • Roxas City



November **World Diabetes Day Press Conference**



**PUT FEET FIRST
PREVENT
AMPUTATIONS**

World Diabetes Day is co-sponsored by the International Diabetes Federation and the United Nations

For life is beautiful...



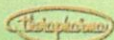
Simvastatin

Vidastat
Now for Life.

GCR **PROLONGS LIFE!**
Guaranteed excellent Cholesterol Reduction

GCR **Greater Compliance Result**
ASSURES LONG TERM TREATMENT BENEFITS!

Complete product information available upon request.



Your Partner in Cardiovascular Healthcare



Roche

orlistat
XENICAL®

THE RISK-REDUCER.

For the Prevention
and Management of

SYNDROME
X

Please review Product Information before prescribing.
Full details on drug available upon request.



ONE TABLET, ONCE A DAY

Glimepiride

Solosa

COMPLETE CONTROL
RIGHT
FROM THE START

for patients with **type 2 diabetes**

Gliclazide

CLIZID A Trusted Anti-Diabetic
from **NOVARTIS**

High Quality Product

- Efficient Blood Glucose Control
- Good Safety Profile
- Cost-Effective



A Toast to a Good Life for the Diabetic Patient!

 **NOVARTIS**

A Road Less Traveled: Journey of A Diabetic Nun

Sister Regina Pangilinan,
as told to
Patricia B. Gatbonton, MD



Sister Regina Pangilinan of the Holy Spirit Sisters is a shining example of the courage of the human spirit. I met Sister Gina last year, when I became her attending endocrinologist.

Six years before, Sister Gina complained of blurring of vision. Diagnosed with a rare eye degenerative eye disease, her ophthalmologist, Dr. Carlos Naval, started her on steroids to prevent the deterioration of her eyesight. Unfortunately there is no surgical solution to the problem, and she will someday become blind. Dr. Naval explained the need for steroid intake, and she was aware of the double-edged sword: In choosing this option, it may delay

the onset of blindness, but bring on other physical problems. Sister Gina currently has diabetes, hypertension, and Cushing's syndrome, a condition that arises from chronic steroid intake.

Last year, she needed to have very high doses of steroids that pushed her blood sugar to dangerously high levels. That led to her hospitalization and the difficult and long process of trying to control her blood sugar. Her diabetes was so difficult to control that during her confinement, I changed her insulin twice, went from 2 injections to 4 injections a day, while checking her blood sugar 4-6 times a day. I consulted my colleagues and her previous attending for advice. She needed

more than 200 units of insulin a day to bring her sugars to acceptable levels.

I got to know her during her two months in the hospital, and I felt her story and her particular brand of courage would inspire others similarly afflicted.

A BENJAMIN LIFE

Her story begins 38 years ago, when she was born the 10th of 11 siblings in Calapan, Mindoro. The youngest girl born to Benedicta, a businesswoman, and father Leandro, a building contractor and musician, she was the apple of her father's eye.

By all accounts, hers was an idyllic

I felt her story and her particular brand of courage would inspire others similarly afflicted.

childhood. Sister Gina went to school locally, joining the choir and taking piano lessons. Tall, lanky and athletic, she was also on the school varsity basketball team. Sister Gina tells me that she was nine years old when she first got the calling to a religious life. She liked to go to church daily, and was a member of the Legion of Mary. This early leaning faded during her teenage years. A typical teenager, her social life was active and she had a boyfriend as well.

Her doting father tried to dissuade her from her vocation, encouraging her to go to college at the Divine Word College in Calapan and take nursing. Sister Gina instead took Commerce, Banking and Finance and after graduation, worked for four years at the Provincial Hospital as an accounting clerk.

During this time, she had a surgeon in hot pursuit of her, and after 3 years of courting, she finally consented to be a couple. At this time though, the calling came back, stronger than ever. She was confused, and because her beau was an ex-seminarian himself, got him to understand. If it didn't work out, she would find him waiting.

Her father was a harder nut to crack he was still reluctant and she entered the convent without his knowledge at age 23. Sister Gina went through the many years of training for her vocation and took her final vows in 1994.

Sister Gina's assignment was at the chaplaincy service at Our Lady of Lourdes Hospital, entailing care and upkeep of the chapel and visiting sick patients.

I asked Sister Gina to tell me in her own words what its like to both be sick and visit the sick, and whether

being in a religious vocation was helpful to managing her disease.

IN HER OWN WORDS

Sister Gina shares her struggle in the next few paragraphs.

"In my recent years of assignment in this hospital, my work is to visit confined patients a task that is not easy at all. However, these days I would appreciate it better than being the recipient of the visit. Much of what I learned then could never be compared to my present status as a Diabetic patient.

The best possible way to actually empathize with anyone in any condition is to go through it yourself. On the contrary, I wouldn't desire anybody to contract this illness, not even in my imagination.

Except for the reason that I belong to a religious congregation, there is not much difference in terms of feelings compared with a lay person afflicted with diabetes. Stress, irritability, body weakness, lack of patience and other mood changes are a few of the defining qualities of those suffering from this illness. Those things, plus the sudden increase or decrease in sugar would normally be a basis for my physician to advice much needed rest. And in extreme situations, hospital confinement is necessary. In those circumstances when I am left without any option but to rest, my apostolate of visiting patients in hospital is certainly affected.

Complications of my illness are inevitable and not a few times as I lay in bed, the idea that sooner or later my Sisters will just decide to bring me to the Infirmary at the convent confuse me. In my heart, I

am convinced I'm not yet prepared emotionally to stay there. Perhaps the environment just wouldn't help me. No, it isn't the people there that triggers me to worry, but the physical condition of most of them. The sick and disabled sisters are residents of that place, but I'm much younger and more able-bodied that all of them.

I am still in the process of accepting my present situation. This requires effort as most major decisions do.

At times when I'm tempted to give up, I rest on the idea that some of those patients—whom I had the chance to visit earlier—suffer in a far greater intensity than I do now. Thus, I haven't lost hope and I do take comfort in the fact that GOD is a God of love and understanding that is apparently manifested by some of the Sisters in our Community and Congregation. And my gratitude extends even to all family members, friends, and doctors who are equally supportive of me."

FUTURE IN GOD'S HANDS

As of this writing, Sister Gina was just discharged following a urinary tract infection which was causing sepsis. She is recuperating and relieved of her duties for the moment. Her great challenge is to continue to obey with humility the decisions for her future that are out of her hands.

We mistakenly think that those in the religious life have no problems. They are as human as you and I and become ill, too. Sister Gina's willingness to follow God's plan for herself and her disease is difficult, but easier because of her great faith. She will continue to spread the healing power of His love, whether she can see or not. ■

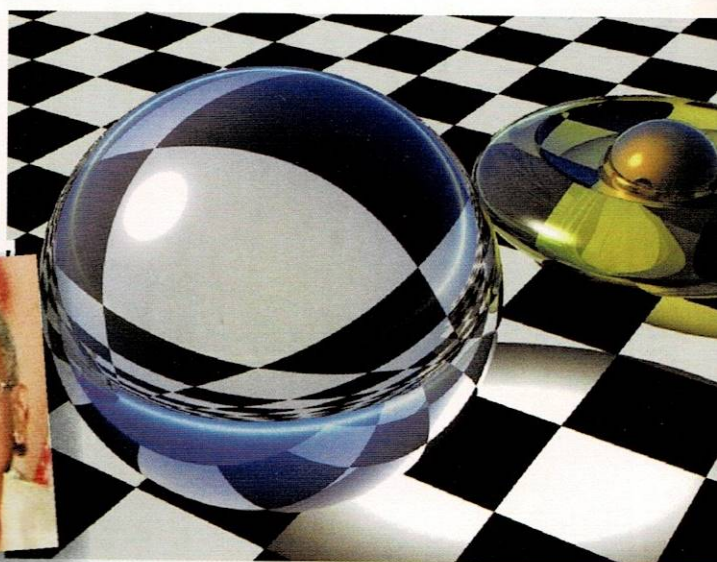


Sister Gina's willingness to follow God's plan for herself and her disease is difficult, but easier because of her great faith.

It is **wise** to
gain knowledge
from **experience**
but **wiser** to
learn from the
experiences
of **others**



Mang Patricio



BY PETE DE LA PEÑA, MD

When you are above 40 years old, one's heart has already beat more than 1.5 billion times. For the 58-year old diabetic patient named Patricio Santos, each heartbeat is not to be wasted.

It was in 1992 when Mang Patricio suddenly lost weight despite frequent snacks and experienced polyuria and polydipsia. He decided to see a doctor thinking that it might have been some prostate problem. He was then diagnosed to have Type 2 Diabetes and was maintained on a Sulfoniluria and a newly-launched Thiazolidinedione. He took his medications regularly and followed up with his doctor. He did not let diabetes get the best of him. Mang Patricio continued with his business in printing and letterpress to augment their family income, support his wife and his children's education.

Seven years later, letterpressing was getting to be more difficult to do as his vision was starting to fail him. He could hardly read the newspaper, and watching television seemed more cumbersome than entertaining. It was at this point that he decided to consult at UP-Philippine General Hospital. His blood pressure was

rising, peaking at 170/100. He already had hypertension and an ACE Inhibitor was started. He was also seen by an ophthalmologist who diagnosed him to have Diabetic Retinopathy. He subsequently underwent pars planovitrectomy with gas and scleral buckling surgery for retinal detachment on the left eye. Lens extraction for cataract and filtering surgery for his glaucoma on the same eye followed. Despite all surgical efforts, however, Mang Patricio's vision on the left eye could not be saved. He could not work on his letterpress anymore so he sold his business.

When it rained, it poured. It was in year 2001 when Mang Patricio's entire residence was burned in a big Tondo fire. Nevertheless, he was still prepared. With the help of his wife, Aling Manolita, they had enough savings and their family stood their ground. Their three children all graduated from College and launched their own careers and business.

In 2003, Mang Patricio felt that he was having chest discomfort that worsened by the day. In October of that same year, he was rushed to the UP-PGH. He had inferior wall myocardial infarction. Coronary

angiography was promptly done, revealing a 3-vessel CAD with anomalous LMCA origin. He was advised CABG. He was able to gather enough financial resources, and subsequently underwent open heart surgery last July 2004. The procedure was a success, as he underwent cardiac rehabilitation without difficulty.

Notwithstanding his blind left eye, Mang Patricio currently works as a sales and marketing agent for his daughter's printing press, named Divine M 3GM Printers. He regularly follows up at UP-Philippine General Hospital's Diabetes Clinic. He is maintained on Glargine, an Alpha-glucosidase inhibitor, Digoxin, an HMGCoA reductase inhibitor, an ARB and Aspirin. He monitors his blood sugar at home, and never fails to do his prescribed exercises upon waking up in the morning. His latest Glycosylated hemoglobin is 5.0%.

Limited as he may be by his disability, Mr. Patricio Santos did not lament over his ailments as others would have done. He still lives his life with a due sense of responsibility and makes each day and heartbeat count. ■

Diabetes management is not a walk in the park.

Uncontrolled blood sugar can lead to debilitating or severely damaging complications such as heart disease, blindness, kidney disease and amputations.

Take the first step in glucose control with Glucerna SR.

Small steps can have huge payoffs. Making Glucerna SR a part of your diet and exercise regimens can give you better glycemic control and improved quality of life.

Glucerna SR is a clinically-proven meal or snack replacement with the Slow Release carbohydrate system that helps keep blood sugar levels under control. Have a glass of Glucerna SR everyday.

Clinically-proven to help keep your glucose levels under control.

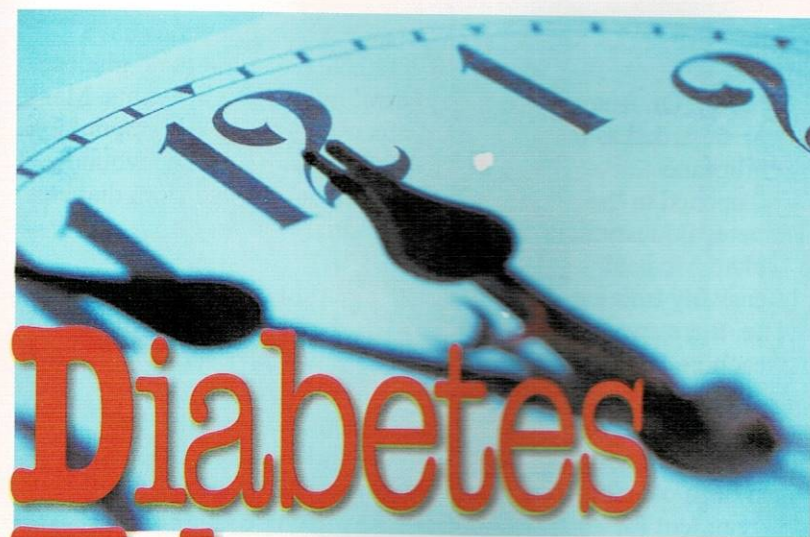
**Recommended by doctors.
Trusted by people with diabetes.**



NEW

Glucerna

**Slow
SR
Release**



Diabetes Education:

Is it really important?

important?

By Ma. Imelda Q. Cardino, MSFN

"He who knows the most lives the longest."



I wake up at least five times a night just to urinate. But I guess it's just because I drink a lot. Nothing is wrong, right?

I am itchy all over. My skin is getting dry. I think I am allergic to something. This has nothing to do with my high blood sugar, does it?

I just woke up but I was trembling and had cold, clammy sweating. Why?

I am soooooo drowsy. I also get easily irritated over very trivial things. Do you think I

should take up anger management?

Will I take the tablet I missed to drink with breakfast together with my lunch dose?

I only inject in my thigh and abdominal area because it is convenient and I can do it myself. I have been doing this for months. My blood sugar though has been uncontrolled. Why?

My type 1 child refuses to

eat. Will I still inject insulin?

Why do I need to check my blood sugar four times a day?

I have always been underweight. Why did I develop diabetes?

What? Go on a diet? Then there is nothing left for me to eat!

Since I am a businessman, I need to treat my clients to dinner. No way can I go on a diet. They will think I am scrimping!

Questions.....questions.....
101 questions ...and MORE

The attending physicians can easily answer these questions and explain them to patients butwill they have the time.... and PATIENCE to do so?

Education is time-intensive. An answer to a question leads to another question. There are so many aspects to explain in layman's term: pathophysiology of the disease, treatment modalities, mode of action of medicines, possible interaction with herbal supplements, medical nutrition therapy, foot care, exercise. These are only some of the basic "subjects" a patient "enrolls in" when he is referred for diabetes education. Simply by looking at the possible topics to be

educational clinic.

In July of 1984, Dr. Augusto D. Litonjua, regarded as the "Father Philippine Endocrinology," opened to the public the Diabetes Educational Clinic of the Makati Medical Center after intensively training the staff. To date, there are over 100 diabetes teaching teams all over the country. The Makati Medical Center and the East Avenue teams, along with some others, have also been offering Diabetic Foot Treatment for sometime now.

Modules like "What Is Diabetes?," "Foot Care," "How To Inject Insulin," and "Home Blood Glucose Monitoring" will each require a minimum of thirty

of starting complications have been achieved with good glucose control by educated patients. Many limbs were saved from amputation by foot care/appropriate wound care patients learned from diabetes educators.

Families with history of diabetes try to be more physically active and watch their weight as a result of education. Women who had Elevated glucose during pregnancy gave birth to healthy, normal babies as a result of being taught how to control their blood sugar.

Aside from the specialized training on diabetes care required of the professional staff, patience and good

Many limbs were saved from amputation by foot care/appropriate wound care patients learned from diabetes educators.

discussed, one would be able to imagine it would take hours to explain them. There should be room for patients to ask questions and, whenever applicable, to perform a return demonstration of what was learned. Compliance to treatment is definitely fostered if the person understands the "whys" and able to do the "hows."

"He who knows the most lives the longest" is a quotable quote from *THE DR. JOSLIN*, the one who had the vision to initiate the founding of a diabetes

minutes. Discussing the individual's nutritional needs will take at least an hour. How long the "Foot Treatment" is will be case-dependent. It is always suggested to patients that they bring along a "significant other" for support and assistance when they come for education and treatment.

Medications were either reduced or withdrawn among type 2 patients whose diabetes were controlled with diet and exercise. Prevention of complications/delay in the progression

communication skills are among The "must have traits" of diabetes educators. A good sense of humor is definitely be a "plus" and will always come in handy a good number of times!

Education has its price, it being an investment ... **time, the desire and will to do it, money...** but is the Return of Investment **PROFITABLE?**

That is the 102nd question YOU have to answer! ■

Diabetes **R**isk **L**ower **W**ith **E**ducation



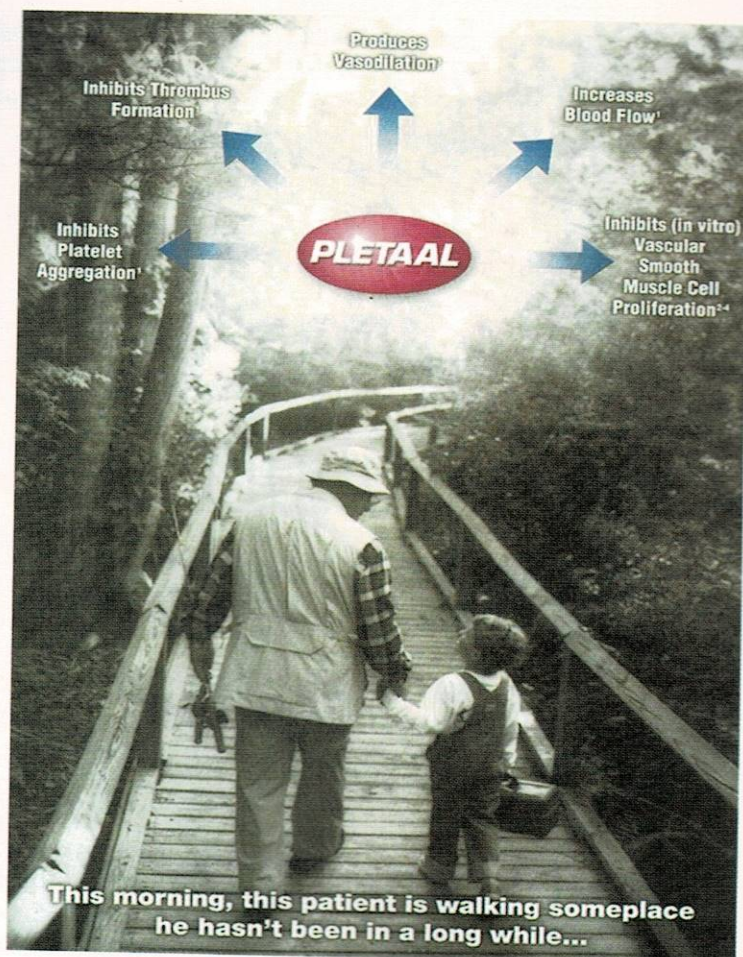
Friday, December 16, 2005

In a major new international study, diabetes researchers pinpoint what they believe to be one of the strongest weapons available to individuals against the disease: education. According to the study, conducted by Japanese researchers and published in the journal *Diabetes Care*, individuals identified as being at "high risk" of type 2 diabetes tend to pull themselves back from the brink of the disease after receiving lifestyle education in the form of a realistic diet and exercise program. The study's authors noted the low cost of providing lifestyle counseling relative to post-diagnosis medical care for diabetics.

oncedaily

Clopidogrel

Plavix 75 mg tablet



Produces Vasodilation¹

Inhibits Thrombus Formation¹

Inhibits Platelet Aggregation¹

PLETAAL

Inhibits (in vitro) Vascular Smooth Muscle Cell Proliferation^{2,4}

Increases Blood Flow¹

This morning, this patient is walking someplace he hasn't been in a long while...



EQUAL Tablets

LOW CALORIE SWEETENER
DIETETIC SWEETENER

A new look to a sweet old friend.

The same EQUAL you've come to trust now comes in a refreshingly new packaging. And as always, EQUAL gives you all the sweetness of sugar without the calories. That's why many doctors recommend it to diabetics. So look for EQUAL in the new packaging at your favorite stores today.

the doctor recommended 0-calorie sweetener

Finally, a diabetes monitor that saves your fingertips for the more inspiring things in life. Test your glucose levels with less pain, more ease.



Introducing the new OneTouch® Ultra® Blood Glucose Monitoring System.

With OneTouch® Ultra®, you can now test on your arm, as well as your fingertips. Testing on the arm provides an opportunity to give your tender fingertips a break. There are fewer nerve endings in the arm, so testing is less painful.

Less pain

- Use of alternate site testing allows the OneTouch® Ultra® to test on the arm.
- Less pain for you when you test on the arm instead of the fingertips.
- Only 2nd blood sample allows for shallow, less painful stick with the extra fine OneTouch® Ultra® Lancets.¹

Ease of Use

- Easy to use OneTouch® Ultra® FastScan® Design Test Strip with capillary action.
- Accurate results in just 5 seconds.
- After testing on your arm, read the result, insert and stick to your healthcare professional.
- Allow for a less painful stick when used with OneTouch® Ultra® Automatic Blood Sample and OneTouch® Ultra® Lancets.

OneTouch® Ultra®

OneTouch® Creating a world without diabetes. All people with diabetes.

mercury drug

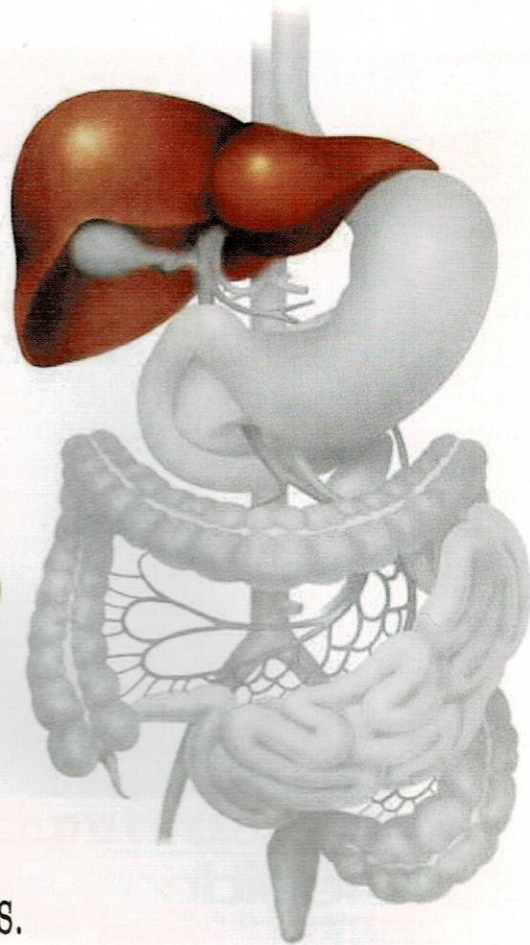
GA

WALGREENS

What is Non-Alcoholic Fatty Liver (NAFL) / Non-Alcoholic Steatohepatitis (NASH)?

An **A**merican **L**iver **F**oundation Primer

Fatty liver is a common finding in patients who are very overweight or have diabetes mellitus.



What is fatty liver?

In fatty liver, fat accumulates in the liver cells. Simple fatty liver usually does not damage the liver, but is a condition that can be identified by taking a sample of liver tissue (liver biopsy) and examining it under a microscope.

What causes fatty liver?

Fat may accumulate in the liver with extreme weight gain or diabetes mellitus. Fatty liver can also occur with poor diet and certain illnesses, such as tuberculosis, intestinal bypass surgery for obesity, and certain drugs such as corticosteroids, or in the setting of heavy alcohol use. A patient has fatty liver when the fat makes up at least 10% of the liver. Eating fatty food by itself does not produce a fatty liver.

Simple fatty liver is not associated with any other liver abnormalities such as scarring or inflammation. It is a common finding in patients

who are very overweight or have diabetes mellitus.

Alcoholism could also result in inflammation of the liver (alcoholic hepatitis) and/or scarring (alcoholic cirrhosis) and needs to be differentiated from NASH by patient history.

Possible explanations for fatty liver include the transfer of fat from other parts of the body, or an increase in the extraction of fat presented to the liver from the intestine. Another explanation is that the fat accumulates because the liver is unable to change it into a form that can be eliminated.

How is fatty liver diagnosed?

Fatty liver is usually suspected in a patient with the diseases or conditions described above. The patient may have an enlarged liver or minor elevation of liver enzyme tests. Several studies show that fatty liver is one of the most common causes of isolated minor

elevation of liver enzymes found in routine blood screening.

In diagnosing fatty liver, the physician will first eliminate the other possible causes of chronic liver disease, especially alcohol abuse. Images of the liver obtained by an ultrasound test, a computed tomography (CT) scan, or a magnetic resonance imaging (MRI) scan, can suggest the presence of a fatty liver.

In the ultrasound test, a fatty liver will produce a bright image in a ripple pattern. A CT scan will show a liver that is less dense than normal. The diagnosis must be confirmed by a liver biopsy, a procedure where the physician inserts a needle into the liver and extracts a sample of tissue, which is examined under a microscope.

How is fatty liver treated?

The treatment of nonalcoholic fatty liver is related to the cause. It is important to remember that simple

fatty liver does not require treatment, since it does not result in damage to liver cells. Obese patients with fatty liver will have reduction or loss of excess fat in liver cells, as well as in other cells in the body, if substantial weight loss can be achieved. Good control of diabetes mellitus with diet, drugs, or insulin also decreases the fat content in the liver.

What is Nonalcoholic steatohepatitis?

Nonalcoholic steatohepatitis (NASH) is described as inflammation of the liver associated with the accumulation of fat in the liver. It differs from the simple accumulation of fat in the liver (NAFL) in that the inflammation causes damage to the liver cells while simple fatty liver probably does not. NASH is not connected with other causes of chronic liver disease, including hepatitis B and C viruses, autoimmune disorders, alcohol, drug toxicity, and the accumulation of copper (Wilson's Disease) or iron (hemochromatosis).

What causes NASH?

There is no known specific cause of NASH. In the past, the typical NASH patient was described as a middle aged, obese woman with excess sugar in the blood, which may have been caused by diabetes mellitus. The patient may have had excess fat in the blood. However, it has recently been reported that patients with NASH do not always fit this description.

One study included men, as well as women, who were not overweight, did not suffer from diabetes mellitus, and did not have excess lipids (fat) in their blood. Another group diagnosed with NASH was composed of children between nine and 16 years old. Most of the children were overweight, but only a few had diabetes mellitus.

What is the risk of NASH?

In NASH, which resembles alcoholic steatohepatitis, the inflammation of the liver is associated with an increase of fat deposits and typically occurs in middle-aged, overweight, and often diabetic patients who do not drink alcohol. It has also been connected with rapid weight loss, or in women taking hormones (estrogen). The fatty tissue in the liver may break up liver cells (steatonecrosis) and the patient may develop cirrhosis (scarring of the liver). Recent studies indicate that NASH can result in the development of fibrous tissue in the liver (fibrosis) in up to 40% of patients or cirrhosis in 5-10% of patients. It is not certain why some NASH patients will progress to this serious form of chronic liver disease while others will not. Studies report that the progression to fibrosis or cirrhosis for NASH patients is variable but can occasionally occur in less than 20 years.

Some studies have shown that 20% to 40% of people who are grossly overweight will develop NASH. However, just because a patient is grossly over-weight,

does not mean that he/she will develop NASH. Many patients with NASH will show an increase of certain iron proteins (ferritin) in their blood, but whether this relates to any injury to the liver is unknown.

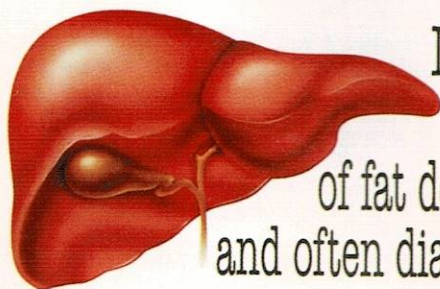
How is NASH diagnosed?

Many NASH patients are unaware of their conditions because they do not exhibit any symptoms. In most cases, NASH results in a slight increase in liver enzyme tests, as do other forms of liver disease. As with fatty liver, the physician will first eliminate the other possible causes of chronic liver disease. Images of the liver are obtained by an ultrasound test, a CT scan, or an MRI scan. The diagnosis must be confirmed by liver biopsy.

How is NASH treated?

Presently, there is no specific treatment for NASH that is universally agreed upon. However, patients who are obese, diabetic, and have high lipids (fats) in their blood are advised to lose weight and control their diabetes and elevated lipids. Usually, a low fat, low calorie diet is recommended along with insulin or medications to lower blood sugar for diabetes.

For patients with NASH who are not overweight and not diabetic, a low fat diet is often recommended. Patients with NASH should avoid alcohol or other substances which could be harmful to the liver. More research is needed to understand what causes NASH so that more effective therapies can be developed. ■



In NASH, which resembles alcoholic steatohepatitis, the inflammation of the liver is associated with an increase of fat deposits and typically occurs in middle-aged, overweight, and often diabetic patients who do not drink alcohol.



Pentoxifylline

TRENTAL is proven therapy for:

- Diabetic Neuropathy¹
- Peripheral Arterial disease of the lower extremities such as Intermittent Claudication² and Ischemic Rest Pain
- Leg Ulcers³

Trental improves blood flow in the microcirculation

- Restores red blood cell deformability
- Inhibits platelet aggregation
- Decreases blood viscosity



Natrapharm

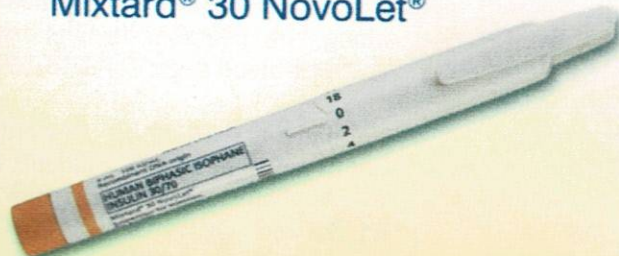
Mfg. by: Aventis RandoK Korea
for Aventis Pharma, Inc.

1. Rendell et al. Skin Blood Flow and Current Perception in Pentoxifylline Treated Diabetic Neuropathy. Angiology Volume 43(10): 851, pp. 1992.
2. Belcaro G. et al. Intermittent claudication in diabetes: treatment with pentoxifylline - a 50 month, controlled, randomized Angiology, 2002, Jan-Feb.
3. Ramani, et al. Hemorheologic approach in the treatment of diabetic foot ulcer. Angiology 1993 Aug; 44(8):6

The Palmet Building, Km. 18 West Service Road, South Luzon Expressway, Parañaque City 1700 Philippines
Tel. Nos. 821-7262 • 776-2001 • 776-1182 to 85

HUMAN BIPHASIC ISOPHANE INSULIN 30/70

Mixtard® 30 NovoLet®



**Physiological insulin profile
in 2 simple steps...**



1. dial the dose



2. push button to inject

For further information, please write or call:

Novo Nordisk Pharmaceuticals (Philippines), Inc.
218, 21/F Wynsum Corporate Plaza, Emerald Avenue
Ortigas Center, Pasig City 1605 Philippines
Tel. No. (632) 6329905, Fax No. (632) 6329903.
www.novonordisk.com



**Bioequivalent
Effective • Economical**

Gliclazide

Glubitor 80 mg tablet

*The Cost-Effective Gliclazide
for Sustainable Diabetes Care*

Metformin

Glumet 500 mg tablet

*Proven Life-Saving Benefits,
Guaranteed Value Savings,
Alone or in Combination*

... so that **Type 2 Diabetes**
does not stand in the way of
LIFE'S SWEET REWARDS

Full prescribing information is available upon request.

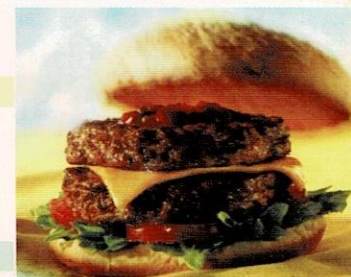
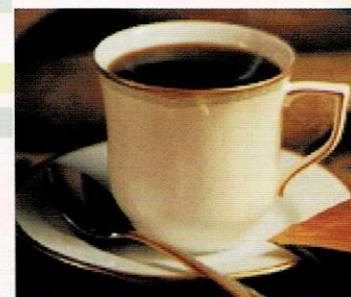
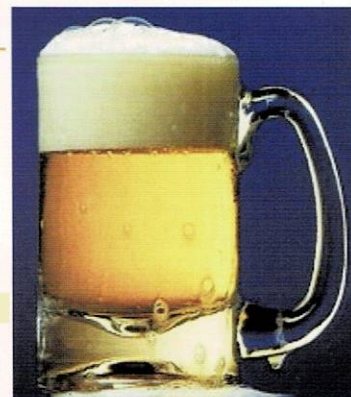
L. R. IMPERIAL, INC.
2nd fl., Bonaventure Plaza, Ortigas Ave.,
Greenhills, San Juan, Metro Manila, Philippines



Kitchen Corner

Know how much calories and fat you get from some of your favorite food.

Item	Portion	Calories	Fat Grams	Cholesterol	% of Fat
BEVERAGES					
Alcoholic					
Beer					
Regular	12 fl. oz	146	0.0	0	0.0
Light					
Champagne	6 fl. oz	135	0.0	0	0.0
Wine, table					
Red, dry	6 fl. oz	121	0.0	0	0.0
Non-Alcoholic					
Coca-Cola	12 fl. oz.	140	0.0	0	0.0
Coffee, regular					
Brewed	6 fl. oz.	4	0.0	0	0.8
Coffee, Instant	6 fl. oz.	11	0.0	0	0.0
FAST FOODS					
Burger King					
Cheeseburger,					
Single	1 serving	317	15	58	42.6
Kentucky Fried Chicken					
Thigh Original	1 serving	278	19.2	122	62.2
Wing Original	1 serving	218	15.6	63	64.4
McDonald's					
Big Mac	1 serving	570	35.0	83	55.3
Hamburger	1 serving	264	11.3	29	38.5
Cheeseburger	1 serving	315	15.8	40	45.1
Filet-O-Fish	1 serving	432	25.6	45	53.3



Source: Harriet Roth's Fat Counter 1993

For Metabolic Syndrome Dyslipidemia



FENOFIBRATE

LIPANTHYL[®] SUPRA

160 mg Tablet **THE HDL RAISER**

In patients with Metabolic Syndrome and/or Type 2 diabetes the serious risk of a CHD event due to low HDL-C is

BAD NEWS

GOOD NEWS

Lipanthyl[®] Supra

- Significantly raises HDL-C to a target level of 40mg/dl¹
- Significantly lowers TG (40-55%)²
- Lowers elevated LDL-C (20-35%)³

References:

1. Lipanthyl[®] SUPRA Product Monograph. Laboratoires Fournier S.A. France.
2. Guichard JP et al. A new formulation of fenofibrate: suprabioavailable tablets. Cur Med Res Opin 2000; 16(2): 134-8
3. Data on file. Laboratoires Fournier S.A. France



LAB FOURNIER PHILS, INC.
Metabolic Syndrome
A Commitment to Life

There's more to it than you think

LABORATOIRES
FOURNIER
PHILIPPINES

Laboratoires FOURNIER Philippines, Inc.
Unit 3603, 36/F, PBCor Tower
6795 Ayala Ave. cor. Herrera St., Makati City
Tel: 815-8271 to 76 • 815-4613

Meet The Sweet Alert Society

Philippine Diabetes Association - Cebu Chapter

By Jolan Lim



Acknowledging that there is more to life than just countless reunions and eternal lunch get-togethers...the burning desire to serve the community became a selfless pursuit.

High School Class 1970 of St. Theresa's College - Cebu, has always been special —very special! After 35 years since their high school graduation, it is amazing that they are still bonded together exchanging beautiful memories, raising families, pursuing careers and other entrepreneurial pursuits, basking in each other's triumphs, easing each other's pains, or simply looking after each other. Now in their fiery fifties, it is amazing how

these giggly teenagers blossomed into Women of Substance. These ladies who grew up amidst the tempest of the seventies have finally come into their own. Acknowledging that there is more to life than just countless reunions and eternal lunch get-togethers, the burning desire to serve the community became a selfless pursuit — though many of them weren't aware that it was called that. What was originally meant to be more of a social undertaking

gave birth into a serious civic commitment. Dr. Marian Kyamko Denopol, Head of the Diabetes Department of the Vicente Sotto Memorial Center and proud member of STC HS Batch 1970 was instrumental in defining the path the group was to take eventually.

When Dr. Denopol invited her classmates to help in the Summer Camp for Juvenile Diabetics she was



Sweet Alert Society
among juvenile diabetics
at the Cebu Juvenile Camp
held in May 2005

conducting, the group forged ahead with no qualms. They found comfort in what they were doing and finally found their true calling. Aligning themselves with the Diabetics Department of the Vicente Sotto Memorial Center under Dr. Denopol, the group tasked themselves to promote diabetes awareness especially among school children in both private and public schools. They later registered the group with the Securities & Exchange Commission to better harness their goals and plans. Thus, sometime in 2002, the group officially became *Sweet Alert Society, Inc.*

It was in 2004, when the group took bolder steps in pursuing their dreams. They sponsored a Poster Making Contest with the theme: Living with Diabetes (You are Diabetes), open to students aged 12-16 and 17-21. The response was enthusiastic and very encouraging. For the longest time

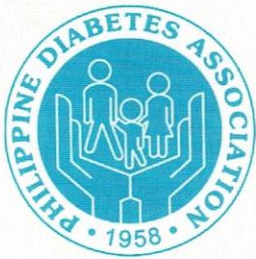
it was the group's dream to put up a comic book on diabetes awareness for distribution. Finally, via the "Colour Everywhere" concert of Christian Bautista which they produced, they were able to raise funds to bankroll their comic book dream. Shortly after, they began their outreach program after finding worthy partners with the Department of Health, Field 7, Department of Education, Culture & Sports, the City Government of Cebu, and the able team of the Diabetics Department of the Vicente Sotto Memorial Center.

After a wobbly start, Sweet Alert is now ready to embark on a dynamic Outreach Program where they go to different public and private schools, barrios and barangays educating the community on the silent killer diabetes. Aside from the lectures on diabetes, its prevention and the like, the blood sugar level and eating habits of

these children are monitored. One of the highlights of the outreach program is the distribution of copies of comic book, "Ant Adventure" written by Stella Moreo and illustrated by Josua S. Cabrera. The group espouse the belief that learning is best imbibed while playing.

This is just the beginning of exciting times ahead. Expect fireworks from this motley group of committed housewives, corporate practitioners and businesswomen, of childhood friends and classmates who not only love to lunch together but also share a burning desire to serve. Their very committed president, Armi Garcia promises that. These ladies really mean business once they get their adrenalin going. With their natural zest and zeal, STC High School Class 1970 promise nothing less. They really know how to work and have fun. And chasing juvenile diabetes is certainly one of them. ■

Sweet Alert Society tasked themselves to
promote diabetes awareness especially among
school children in both private & public schools.



2005

Research Grants in Diabetes

The PDA-Servier Research Grant in Diabetes (P200,000)

TOPIC: Utility Of Admission Blood Glucose as a Screening Tool For Unrecognized Diabetes and/or Latent Glucose Defect Among Hospitalized Patient

Author: **Dr. Ceryl Cindy Tan**

The PDA-Fournier Research Grant for Metabolic Syndrome (P100,000)

TOPIC: Metabolic Syndrome And Stoke Among Filipino Patients In A Tertiary Hospital

Author: **Dr. Lolita Brigida V. Micu**

The PDA-Therapharma Research Grant in Diabetes (P150,000)

TOPIC: The Predictive Value Of HbA1c Measurement In Detecting Type 2 Diabetes Among Individuals W/ Non Diagnostic Fasting Glucose

Author: **Dr. Rebecca Lim-Alba**

The 2005 PDA Research Grant in Diabetes (P250,000)

TOPIC: Prevalence Of Unrecognized Diabetes And Quality Of Care Given For Patients With Hyperglycemia Admitted To Adult General Medical Ward And Intensive Care Unit

PRESENTOR: **Dr. Ceryl Cindy Tan**

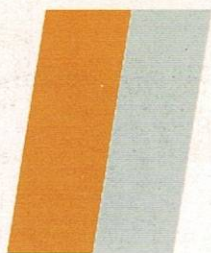
The PDA-Natrpharm Research Grant in Diabetes (P100,000)

TOPIC: The effects Of Virgin Coconut Oil On Weight And Lipid Profile

Author: **Dr. Cynthia C. Pollisco**

WHAT'S
YOUR
TENTACLE?





GLICLAZIDE DIAMICRON[®] MR

High β -cell selectivity^{1,2,3}

Diamicon MR, unlike glimepiride and glibenclamide, is highly selective for the β -cell (SUR1) over the cardiac (SUR2A) and vascular (SUR2B) K_{ATP} channels. This allows for an effective secretagogue action, with avoidance of potential cardiovascular interaction at therapeutic concentrations.

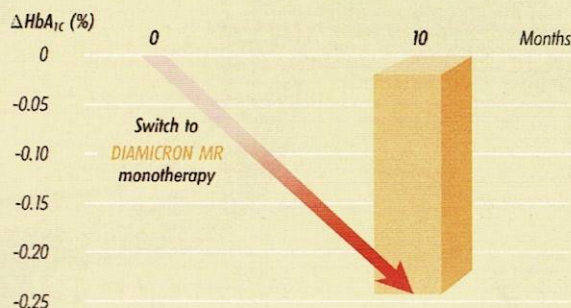
β -cell:cardiac selectivity ratio*

Glimepiride ¹	1.8
Glibenclamide ²	6
DIAMICRON MR ³	16 000

*Ratio of sulfonylurea concentrations, at cloned β -cell vs cardiac channels, having 50% maximal effect

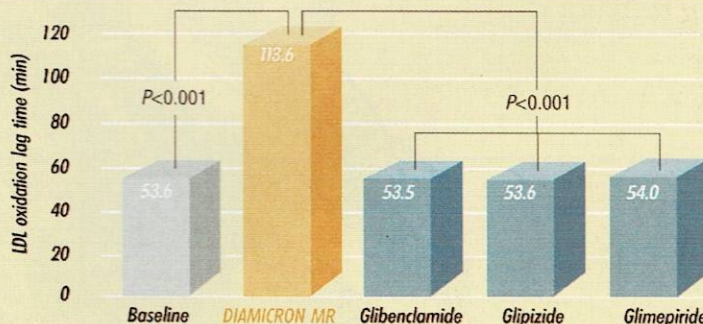
Efficient metabolic control⁴

In a double-blind pivotal study of 401 patients, Diamicon MR produced a sustained reduction in mean HbA_{1c} despite previous treatment with up to 2 oral antidiabetic agents.



Additional hemovascular properties⁵

Diamicon MR, unlike other sulfonylureas, highly significantly increases the resistance of LDL to oxidation through its unique free-radical-scavenging effect.



Global metabolic and vascular treatment, first-line in type 2 diabetes.

Composition: Each modified-release tablet contains 0.030 g of gliclazide. **Indication:** Type 2 diabetes. **Dosage:** 30 to 120 mg depending on response, once daily with breakfast, including in elderly patients or those with mild-to-moderate renal failure. **Properties:** Hypoglycemic sulfonylurea, restoring first peak of insulin secretion, increasing insulin sensitivity. Glycemia-independent hemovascular effects, antioxidant effect. No active circulating metabolite. **Contraindications:** Type 1 diabetes, hypersensitivity to sulfonylureas, severe renal or hepatic failure, pregnancy and lactation, miconazole coprescription. **Interactions:** Hyperglycemic action may be caused by danazol, chlorpromazine, glucocorticoids, progestogens, β -2 agonists. Its hypoglycemic action may be potentiated by phenylbutazone, alcohol, fluconazole, β -blockers, possibly ACE inhibitors. **Adverse effects:** Hypoglycemia, gastrointestinal disturbance (reported), skin reactions (rare), hematological disorders (rare), hepatic enzyme rises (exceptional). **Overdosage:** Possible severe hypoglycemia requiring urgent IV glucose and monitoring. Further information available upon request.



**2 to 4 tablets*
once daily**

* in most patients

1. Song DK, Ashcroft FM. *Br J Pharmacol*. 2001;133:193-199. 2. Gribble FM, Tucker SJ, Seino S, Ashcroft FM. *Diabetes*. 1998;47:1412-1418. 3. Gribble FM, Ashcroft FM. *Diabetologia*. 1999;42:845-848. 4. Drouin P and the Diamicon MR study group. *J Diabetes Complications*. 2000;14:185-191. 5. O'Brien RC, Luo M, Balazs N, Mercuri J. *J Diabetes Complications*. 2000;14:201-206.