



ISSN 1908-1227

DIABETES WATCH

A Publication of the Philippine Diabetes Association, Inc.

May - August 2008

YEAR XXV, NO.2

**Fetal programming:
Health and disease
start in the womb**

**Less shots with basal
insulin analogues**

Contraceptives for GDM

Stop alcohol





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:

1. 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.
2. 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
3. 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

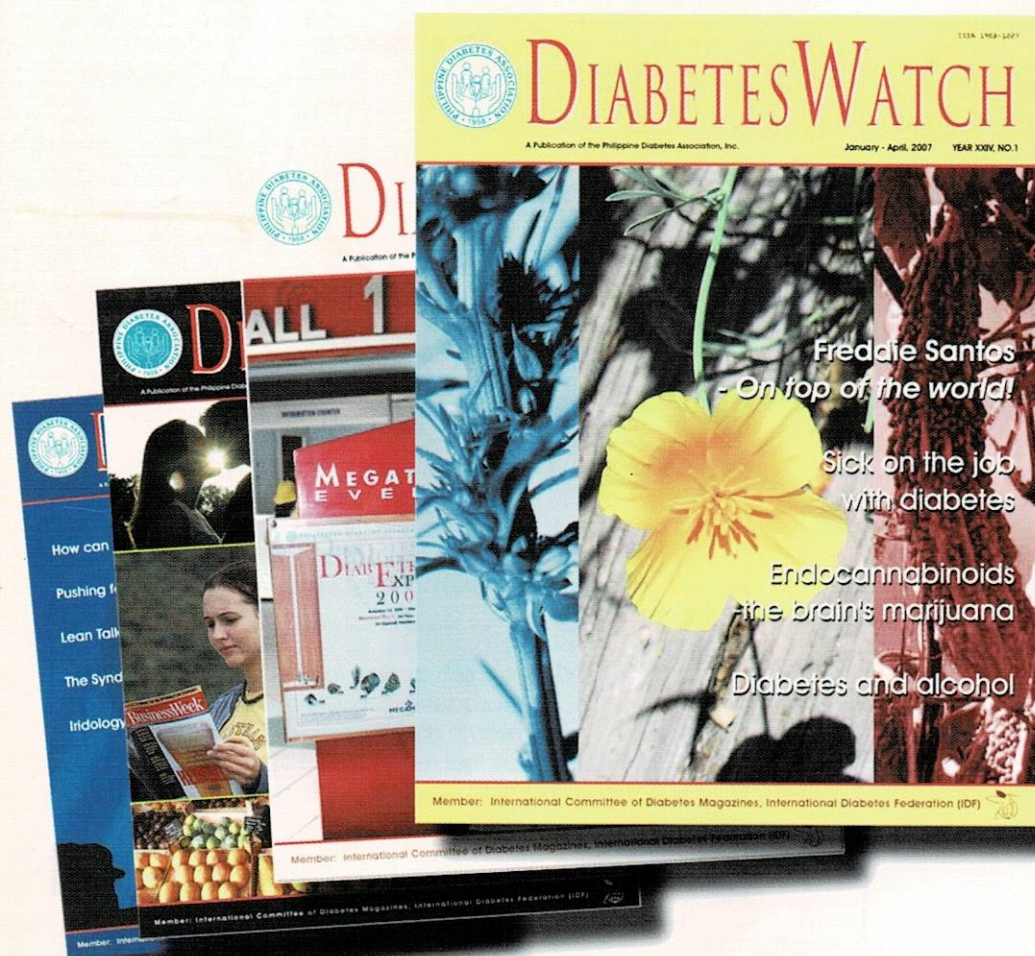


**ORDER
NOW!**

DIABETESWATCH

*Doctors, do you want your patients to learn more about diabetes?
They can order and buy their own copy of **DiabetesWatch** from you.*

Your patients can also join the Philippine Diabetes Association and receive the **DiabetesWatch** magazine for free!



*Let your patients
read and learn while
waiting in the
clinic....*

***DiabetesWatch** is
your patient's
magazine.*

Order your copies of **DiabetesWatch** from the PDA office and avail of our discounted price!!

For details log on to www.diabetesphil.org or call us at 531-1278 / 534-9559. You can also send us e-mail at phildiab@pworld.net.ph

FROM THE EDITOR'S DESK



Pregnancy is such a wonderful and blessed time in a woman's life. For the diabetic woman, it is this and more... it is full of challenges.

This issue focuses on the pregnant diabetic. It answers many of her questions. What happens when a pregnant woman learns her blood sugars are elevated? What does a diabetic woman in the reproductive stage need to know to prepare her well for her pregnancy? What happens to the baby in the process? Answers to these and many more are featured in this

issue through excellent discussions of our staff. The lead article "Fetal programming: Health begins in utero" is contributed by Dr. Jojo Raboca.

We continue with our vice alert, this time focusing on the dangers of alcohol. Special events of the Philippine Diabetes Association (PDA), such as the Diabetes Awareness Week, Unite for Diabetes and the Diabetes Workshop in Cagayan are highlighted. PDA President Dr. Tommy Ty-Willing describes planning activities as we gear up for celebrating the Association's 50th year this November. Featured partner organization, the Philippine Society of Endocrinology and Metabolism (PSEM) introduces its "Hawak-Kamay Laban sa Diabetes project" as shared by PSEM President Dr. Lala Acampado and PSEM Advocacy Committee Chair Dr. Gabriel V. Jasul. Regular contributor cardiologist Dr. Rogie Tangco leads us to understanding diabetes and cardiovascular disease through "A Fantastic Voyage".

With this issue, it is hoped that the pregnant diabetic will have a better understanding of her critical condition, get an over-all sense as to its proper care and most especially, to trigger her in preparing for this very important time in her life long before conception, to ensure an uneventful pregnancy and delivery.

Enjoy reading! We welcome your comments, email me at phildiab@pworld.net.ph

Elizabeth Paz-Pacheco
Elizabeth Paz-Pacheco, MD
Editor-in-chief



PHILIPPINE DIABETES ASSOCIATION, INC.

"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 2007-2008

TOMMY S. TY WILLING, MD
Chairman & President

EDITHA ARCEO-DALISAY, MD
Vice-Chairman & Vice-President

ELIZABETH PAZ-PACHECO, MD
Secretary

SUSAN YU-GAN, MD
Treasurer

BOARD OF DIRECTORS

SIOKSOAN CHAN-CUA, MD

GABRIEL V. JASUL, MD

SANIROSE S. ORBETA, MSRD

MA. IMELDA Q. CARDINO, MSFN

MS. MARIPEE GENATO (2008)

MR. AMMIETO BACUS (2008)

MA. TERESA PLATA-QUE, MD
(Immediate Past President)

OUR MISSION

Be the prime mover of excellent diabetes care and prevention in the Philippines

OUR VISION

A diabetes-free Philippines.

OUR VALUES

INTEGRITY Above all, the nobility of our purpose. We serve patients, pursue education and conduct research with passion and without regard for personal gain. Honesty and transparency rule our behavior in relating with fellow members, partners, supporters and other stakeholders of our association.

EXCELLENCE Perfectionists, we expect from ourselves only the best effort. We continuously upgrade our knowledge and skills, adopt ever-improving technologies, and expand the reach of our services to attain a diabetes-free Philippines. Our mentors, generous with their knowledge and time, model excellent leadership.

COOPERATION We work as one for the common good. Enjoying the camaraderie, observing politeness and maintaining loyalty even in dissent. We partner with companies and other specialties that reach for the same goal. Caring for everyone's well being, we make work pleasant for members and staff.

COMMITMENT Persistent in our search for solutions to diabetes. We have selflessly devoted over four decades to the improvement of diabetes care, education and research to prevent the onset of the disease in high risk individuals and the complications in those already afflicted by it. We take on responsibilities with diligence until their successful conclusion. We shall not rest until we achieve a diabetes-free Philippines.

PDA CHAPTERS

Albay Chapter

President: JOSE C. COPE, MD
Dr. Amando D. Cope Member Hospital
Tabaco City 4511
Tel. (052)830-1334
Mobile: 0917-4692984
cope_jo@yahoo.com

Baguio-Benguet Chapter

President: FRANCIS M. PIZARRO, MD
122 South Sanitary Camp, Baguio City 2600
Tel. (074)443-3668
Mobile: 0917-7320107
fmpizarro@yahoo.com

Batangas Chapter

President: THERESA MARIE VALDEZ-FALLER, MD
431K. Lubis St., Block 11 Mataas na Kahoy,
Batangas City
Tel. (043)924- 4051 loc. 2015 / Fax. (043)942- 0020
Moble: 0918- 9306184
avfallermmd@yahoo.com

Bohol Chapter

President: LOURDES M. GALLEGO, 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 / (038)411-4504
dr.lourdesgallego@yahoo.com.ph

Bulacan Chapter

President: MA. JOSEFA YANGA, MD
31 Hulo Meycauayan, Bulacan 3020
Telefax. (02)727-7690
Mobile: 0917-5169375
majosefay@yahoo.com

Cagayan De Oro Chapter

President: EMILIANA GAKO-PATRIANA, MD
Polymedic General Hospital
Velez St., Cagayan de Oro City 9000
Tel. (08822)724-892 / (08822)724914 loc. 1217
Mobile: 0917-7149988
patriana_eme@yahoo.com

Cagayan Valley Chapter

President: MAGNOLIA B. REYES, MD
III Ugac Extension Luna St., Highway
Tuguegarao City, Cagayan 3500
Tel. (078)844-1571
Mobile: 0917-3269273
mbattubgreys@yahoo.com

Camarines Norte Chapter

President: PAUL LUIS G. PALENCIA, MD
OLH Vinzon Avenue, Daet, Camarines Norte 4603
Tel. (054)721-2664
Mobile: 0917-5312221

Camarines Sur Chapter

President: RAMON T. CACERES JR., MD
G/F Plaza Medica Bldg., Panagniban Drive,
Naga City
Tel. (054) 472-1271
G/F Ago General Hospital Rizal St., Legaspi City
Tel. (052) 481-4442
rrncaceres@yahoo.com

Capiz/Roxas Chapter

President: CONCEPCION PIZARRO-NOCHE
St. Anthony Hospital, Roxas City, Capiz 5800
Tel. (036)621-1869
Mobile: 0918- 9207084
pdaroxaschapter@yahoo.com

Cebu Chapter

President: EVELYN GAMALLO, MD
Visayas Community
1317 San Francisco St., Sta. Cecilia Village
Gusa, Cebu City
Tel. (032) 412-5838 / Fax. (032) 253-3848
evah_g@yahoo.com

Davao Chapter

President: JUDY ANNE GATMIN, MD

18 2nd Cor. 4th St. Phase 3 Hillside Subd.,
Bajada, Davao City 8000
Tel. (082)235-0872
judyanne88@yahoo.com

Ilocos Sur Chapter

President: ESTRELLITA GARCIA-BRINGAS, MD
Gabriela Silang General Hospital
Vigan, Ilocos Sur, 2700
Tel. (077)722-7347
Mobile: 0916-6725210
bchaigb@yahoo.com

Iloilo Chapter

President: FRANCIS PASAPORTE, MD
Fancom Medical Plaza
Quezon St., Iloilo City 5000
Tel. (033)509-4626
Mobile: 0917-3026543
fipasaporte@hotmail.com

Laguna Chapter

President: ANTONIO S. CHUA, MD
Laguna Provincial Hospital
J. de Leon St., Sta. Cruz, Laguna 4009
Tel. (049)808-1560
Mobile: 0917-4574128
doc_tonychua@yahoo.com

Leyte Chapter

President: AVITO SALINAS, MD
Divine Word University Hospital
Tacloban City, Leyte 6500
Tel. (053)321-4551
Mobile: 0920-9282435

Lucena Chapter

President: MA. LOURDES REYES-GONZALES, MD
Lucena United Doctors Medical Hospital
Bgy. Isabang, Lucena City
Tel. (042)710-5112
Mobile: 0916-4364507

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
Mobile: 0920-9611838

Nueva Ecija Chapter

President: RONALDO DE RAMOS, MD
Emmanuel Specialty Clinic
Natividad St., Cabiao, Nueva Ecija 3107
Telefax: (044)486-3294
Mobile: 0920-9223328
doc_deramos@yahoo.com

Palawan Chapter

President: ROSALIE REYES, MD
Reyes Clinic
Malvar St., Puerto Prinsesa Palawan
Tel. (048)433-4001 / (048)433-4162
Mobile: 0917-5750810
Email: chale_md@yahoo.com

Pasig Chapter

President: NICK VILLATUYA, MD
8 West Capitol Drive, Kapitolyo, Pasig City 1603
Tel. (02)633-2389 / (02)632-9461
Mobile: 0919-3372002

Sorsogon Chapter

President: MA. LIDUVINA F. DORION, MD
Sorsogon Provincial Health Office
4700 Macabog, Sorsogon City
Tel. (056)211-1032
Mobile: 0919-4307003
lidu@globalink.net.ph

Zamboanga Chapter

President: FATMA IBBA-TIU, MD
Zaec Community Medical Center
247 San Jose Road, Zamboanga City 7000
Tel. (062)992-2788
Mobile: 0917-7000625

DIABETESWATCH

EDITORIAL BOARD

Augusto D. Litonjua, MD
Editor Emeritus

Elizabeth Paz-Pacheco, MD
Editor-in-Chief

Patricia B. Gatbonton, MD
Managing Editor

Florence Amorado-Santos, MD
Circulation Manager

Sections

Nemencio A. Nicodemus Jr., MD
Features editor

Gabriel V. Jasul, Jr., MD
Nutrition editor

Ms. Ma. Imelda Q. Cardino
Ms. Sanirose S. Orbeta
Sub editors

Pepito E. de la Peña, MD
Mia C. Fojas, MD
News editors

Informatics Editor

Iris Thiele C. Isip-Tan, MD
Cecille A. Jimeno, MD
Cecille Dela Paz, MD

Article Contributors

Tommy S. Ty Willing, MD
Rogelio V. Tangco, MD
Josephine Carlos-Raboca, MD
Laura Trajano-Acampado, MD
Magnolia B. Reyes, MD
Paul Matthew Pasco, MD
Angelica Del Mundo, PT

Cartoons

Allan Hernandez, MD

Art Director

Dondi B. Gerardino

The Diabetes Watch 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: phildiag@pworld.net.ph
secretariat@diabetesphil.org
www.diabetesphil.org

Printed by Lizamen Printing Services

Disclaimer:
The views and opinions expressed by the contributors of DiabetesWatch are for general reference only. The individual reader should consult his doctor for personal treatment or other medical advice. The Philippine Diabetes Association disclaim all responsibilities and liabilities for content expressed in this magazine including advertisements therein. All contents of this newsletter are the copyright of Diabetes Watch and may not be reproduced in any form unless with written permission.

CONTENTS

May - August 2008

11

Fetal programming: Health and disease start in the womb

Josephine Carlos-Raboca, MD

-- Your health today has its beginnings from the time you were in your mother's womb. Truth or myth?

12

Gestational Diabetes: From HAPO to MiG, What next?

Iris Thiele Isip Tan, MD

-- A glucose intolerance with onset or first recognition during pregnancy.

14

Less shots with basal insulin analogues

Florence Amorado-Santos, MD

-- Revolutionized diabetes management puts insulin as part of the more aggressive anti-diabetic regimen.

16

IDF Press Release

-- Grant supports diabetes self-management education program in the Philippines.

18

Diabetes and Exercise

Angelica Del Mundo, MD

-- It's no secret that Exercise is key to controlling Diabetes Mellitus -- and many doctors already urge their diabetes patient to get active.

19

When Diabetes Gets Into Your Nerves: Neurological complications of diabetes

Paul Matthew Pasco, MD

-- Diabetes can also affect the blood vessels supplying the brain, leading to a stroke.

20

Hawak kamay laban sa diabetes: PSEM's Diabetes Advocacy Program

Laura T. Acampado, MD and

Gabriel V. Jasul, Jr., MD

-- PSEM is intensifying its public awareness campaign on diabetes

25

PDA: A preview of 50 years

Tommy Ty-Willing, MD

-- To unify all interests and entities in the Philippines concerned about diabetes mellitus into a single association.

31

PDA Cagayan Valley Chapter

Magnolia B. Reyes, MD

33

Overcoming barriers to use of handheld computers in medicine

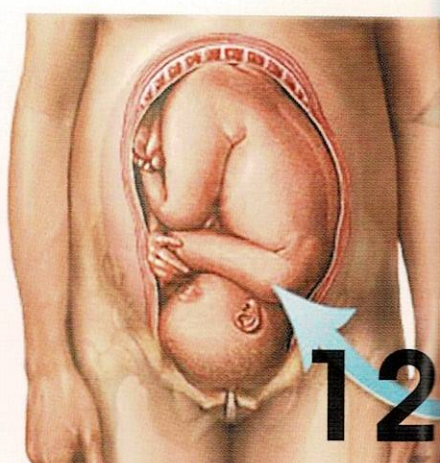
Iris-Thiele Isip-Tan, MD

-- It is easier to maintain a To Do list on a PDA, than on a piece of paper.

34

Informatics: *Navigating the Net*: Managing Gestational Diabetes with the help of the National Institutes of Health (NIH) Website

Cecile de la Paz, MD



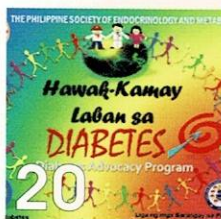
Regular Articles

4 From the editor's desk • 5 PDA Chapters • 7 Meanderings

9 Everything you've always wanted to know about diabetes...(but were afraid to ask!)

19 The lighter side of diabetes • 22 Kitchen corner

36 PDA on the move



35

Etc, etc...Other web resources and references for pregnant women with diabetes

Cecilia A. Jimeno, MD

38

Yahoo for YACON! Trivia and Nutrition information about the latest craze in diabetes diets

Cecilia A. Jimeno, MD

-- It belongs to the same family of sunflower, common daisy, dandelion, and lettuce.

MEANDERINGS



Some thoughts on GDM

Augusto D. Litonjua, MD
Editor Emeritus

When the pregnant woman develops high blood sugar, that woman and her developing fetus and baby become at risk - for the woman, she may have a higher rate of miscarriage, high blood pressure or preeclampsia, and premature labor; for the baby, it becomes at risk for congenital malformations, bigness or macrosomia, birth injury, and death in the

immediate delivery period. For these reasons, there is a never-ending quest for what is the ideal way to diagnose and manage high blood sugar in pregnancy. A more recent guidance comes from the National Institute for Health and Clinical Excellence (NICE) on how to manage diabetes and its complications from the time pregnancy is contemplated to the time when the baby is delivered (Practice:336, 714 to 717, 2008).

When high blood sugar, of any degree, is first diagnosed in a current pregnancy, it is called gestational diabetes, or GDM. No matter if the diabetic state was present before pregnancy but not diagnosed, no matter what the eventual medications will be needed to control the high blood sugar - so long as the first knowledge about it occurs in that pregnancy.

How do you know if you have GDM? If you are obese, had GDM in a previous pregnancy, have a family history for diabetes in a first degree relative or had a big baby (more than 8 lbs) in a previous pregnancy, then you should undergo an oral glucose tolerance test at first visit to your obstetrician, diabetologist or endocrinologist. Otherwise, if need be, then the test should be carried out at the 24th to 28th week of pregnancy.

The manner of carrying out the glucose tolerance test (OGTT) may differ. The World Health Organization recommends that 75g glucose orally be given in the fasting state followed by a blood sugar test 2 hours later. In the United States, the 100g OGTT is still used, some practitioners outside of the United States also follow this procedure.

There was a time when all women who become pregnant are advised to undergo screening for GDM. There has been much debate on this and a task force (the US Preventive

Services Task Force, *Annals of Internal Medicine*. 2008;148; 766-775) weighs the potential benefits and harms of universal screening. A potential harm of gestational diabetes screening is unnecessary glucose testing and treatment of many women who would not ultimately develop problems related to gestational diabetes. Potential benefits include reduction in maternal preeclampsia (high blood pressure), stillbirth, brachial plexus injuries and clavicular fractures in the baby during delivery. I take the view that only those with a high risk for GDM should be screened. Adverse psychological effects and burdens of screening have been negated by a cross-sectional study involving 68 GDM patients and 50 non-diabetic controls. Here, researchers found no differences between groups in mood.

There have been changes in the management of high blood sugar in pregnancy. Whereas a few years back, oral anti-diabetic tablets were taboo, guidelines have now changed to:

"Metformin may be used for women with pre-existing diabetes as an adjunct or alternative to insulin." Glibenclamide has also been deemed safe in other studies, and may be the only medication for high blood sugar in pregnancy for some women.

The newer insulins - which differ from human insulin in structure and therefore were considered as being potentially antigenic - are now allowed to be used in pregnancy. The guidelines state, "rapid acting insulin analogues aspart and lispro are safe to use during pregnancy; isophane insulin is the first choice for long acting insulin during pregnancy."

Other drugs are considered unsafe during pregnancy, to wit,

"Discontinue angiotensin converting enzyme inhibitors and angiotensin II receptor antagonists before pregnancy or as soon as pregnancy is confirmed; substitute with alternative anti hypertensive agents suitable for use during pregnancy." Thus, all medications must be revealed to the attending physician and obstetrician.

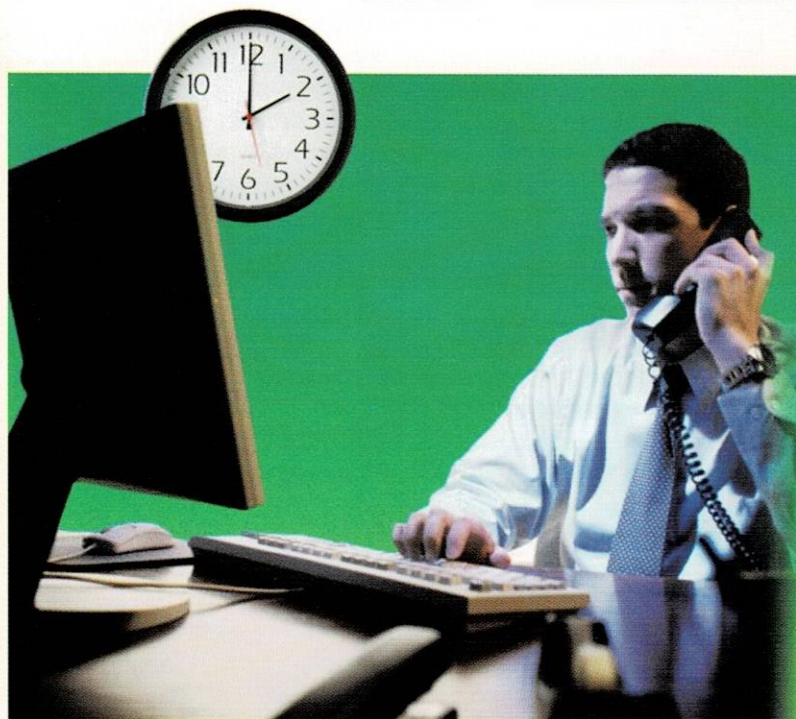
Also, "discontinue statins before pregnancy or as soon as pregnancy is confirmed."

Thus, the state of diagnosis and management of pregnant woman once diagnosed to have high blood sugar is still evolving, in the continuing quest for what is safe for the mother and her baby. **D**

Acarbose



Glucobay[®]



It's two hours
after lunch

*How's his
blood sugar?*

-  Unique non-systemic MOA directly reduces post-prandial hyperglycemia
-  Prevents disease progression at every stage of the diabetes continuum
-  Prevents onset of type 2 DM in IGT patients
-  Effective as monotherapy in early diabetes
-  Effective in advanced diabetes insufficiently controlled with metformin and sulfonylureas
-  Proven CV Risk reduction for both IGT patients and frank diabetics
-  Proven long-term safety

Manufactured by:
Bayer Schering Pharma AG



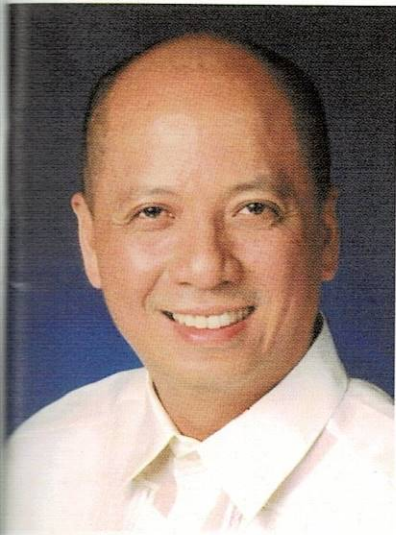
Bayer HealthCare
Bayer Schering Pharma

For full prescribing information, write or call:

Bayer Philippines, Inc.
6795 Ayala Ave. cor. Herrera St.
Makati City, Metro Manila Philippines 1206
Phone: +63-2-8879745
Fax: +63-2-8152068

EVERYTHING YOU ALWAYS WANTED TO KNOW ABOUT DIABETES (BUT WAS AFRAID TO ASK!)

Roberto C. Mirasol, MD
St. Luke's Medical Center



Pregnancy is a wonderful time for any mother. But if you have diabetes it could potentially present with a lot of problems to the doctors caring for you. You need to plan on it carefully so that you can have a safe pregnancy and delivery. In this issue of DiabetesWatch we answer your questions on diabetes and pregnancy. Read to learn more.

I am pregnant, will my baby have diabetes? No. Babies do not develop diabetes suddenly at birth. However, they will carry the same risk as you have in developing diabetes in the future. If your baby is big, studies have shown that they become obese later in life and may develop diabetes. Exercise, proper eating habits, weight management should be started early in the infants of diabetic mothers.

Should I stop my diabetes pills now that I'm pregnant?

Yes. Oral diabetic medications have not been fully studied in pregnancy. Your doctor will perhaps shift you to insulin. He will ask you to monitor your sugars more frequently during pregnancy and decide on an insulin which best suits you. If you are already on insulin, your dosages may increase due to the hormones which are being produced by the placenta.

What happens if my blood sugars are always high during pregnancy?

Your baby will be very big. If you have high blood sugar your baby will likely have high blood sugars as well. The baby makes a lot of insulin to counteract this high blood sugar and uses the extra calories or stores them as fat. The baby is in a sense overfed! This will produce problems during delivery and you might end up having a caesarean section. The baby might have problems with the shoulder and might get stuck. The likelihood of you delivering early is high. This will produce breathing problems for the baby. The baby may have heart problems, bleeding into the brain, intestinal problems, and vision problems as well. Your baby might have low blood sugars after delivery especially if your sugars are uncontrolled. Therefore control of your sugars is the key.

What should I do to keep my sugars in good control?

Stick to your meal plan. You can talk to a dietician about this. Avoid simple sugars- honey, jams, jellies, preserves, chocolates, soft drinks, cakes, candies, pastries and ice cream. Eat fruits within your meal plan. It has fibers and a lot of vitamins and minerals. Eat small frequent feedings. You should have 3 main meals and three snacks. Exercise regularly. Exercise around 30 minutes of moderate intensity. Walk a lot. Monitor your sugars regularly. You need to check your blood sugar more often, sometimes 6 to 8 times a day, which might be higher than when you are not pregnant.

This provides immediate feedback and can help you make the right choices. Checking blood sugar levels often can help you keep your blood sugar in control.

I often get low sugars in the early morning. Is this associated with my being pregnant? What should I do?

Help! Your doctor is keeping your sugars to as near normal as he could get them to be. This could lead to low blood sugars at certain times. Early in the morning low blood sugars means you took more insulin at night or you missed your midnight snack. Look at the pattern and adjust your insulin. Seek the advice of your doctor or educator. They can sort out your problems. Control and treat the low blood sugar quickly by taking something sweet. If you are near your regular meal, advance your meal. You should have a ready source of carbohydrates on hand at all times. Teach your husband and close co-workers or friends how to help in case of a severe low blood sugar reaction.

After delivery, will I still be on insulin? If you are breast feeding, which is the best course of action to take after delivery, stay on insulin for a while. This will keep your sugars at bay. See your doctor as to when you need to go back to your tablets.

It is important to have regular follow-up with your doctor. You must keep your appointments. You will be seen more often than a regular patient who is not pregnant. If you keep your blood sugar in control, chances are you will have a healthy pregnancy and a healthy baby. D

We welcome your questions, comments or suggestions fax us at 5311278 (PDA office) or e-mail me at mbmirasol@yahoo.com.

DIABETIC DYSLIPIDEMIA

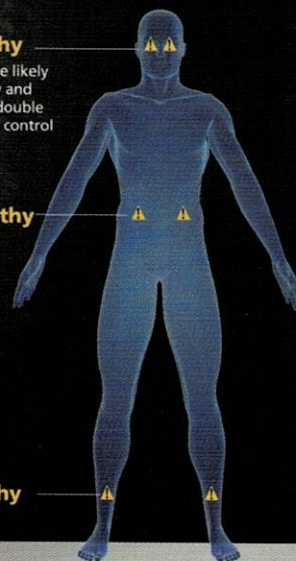
Open your eyes to microvascular risks

Diabetic retinopathy

At least 50 million people are likely to have diabetic retinopathy and this number is projected to double by the year 2025 if no major control activity is developed.¹

Diabetic nephropathy

Diabetic neuropathy



Lipanthyl®, first lipid modifying agent shown to prevent diabetic eye disease

New Lancet 2007

- Reduces the need for laser treatment in patients with and without known diabetic retinopathy²
- Decreases development and progression of existing diabetic eye disease²

Rapid benefits from eight months onward and increased throughout the study period³

Additive to tight blood pressure and glycemic control¹

- New data to follow up the results of the 2005 FIELD study²

Sub-analysis³

Out of 9795 patients, 402 underwent one or more laser treatments during the study. In total, 872 courses of laser treatment for diabetic retinopathy were performed.

Endpoints

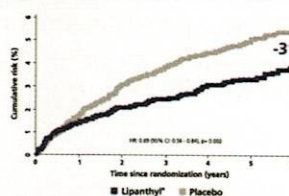
Classification of laser treatment for:
- macular edema
- proliferative retinopathy without macular involvement

Lipanthyl® reduces the leading cause of blindness and vision deterioration for T2D³

- Lipanthyl reduces the need for laser treatment for any type of diabetic eye disease

First laser therapy

Effect of Lipanthyl® on first laser therapy for any type of diabetic retinopathy



Reduction in the need for laser treatment:
-31% for macular edema
-30% for proliferative retinopathy

Reduction in the need for cumulative laser treatment:

- 37% for overall population
- 49% for patients without retinopathy at baseline

References:
1. International Diabetes Federation's World Diabetes Day 2002 Focuses On Eye Complications. <http://www.idf.org/home/index.cfm?node=535>. Last accessed November 2007.
2. FIELD study investigators. Effects of long-term fenofibrate therapy on cardiovascular events in 9795 people with type 2 diabetes mellitus (the FIELD study): randomised controlled trial. *Lancet* 2005;366:149-61.
3. FIELD study investigators. Effect of fenofibrate on the need for laser treatment for diabetic retinopathy (FIELD study): a randomised controlled trial. *Lancet* 2007;370:1687-97, published online November 6th, 2007.



FENOFIBRATE
LIPANTHYL NT 145mg

THERE'S MORE TO IT THAN WHAT YOU THINK.



F FOURNIER PHARMA
A member of the Solvay Group

8th Flr. Port Royal Place 118 Rada St., Legaspi Village 1222 City of Makati, Philippines
Telephone No.: (632) 894-0688 Fax No.: (632) 892-3831

FULL PRESCRIBING INFO AVAILABLE UPON REQUEST

Fetal programming: *Health and disease start in the womb*

Josephine Carlos-Raboca, MD
Makati Medical Center

Are you below 40 years old and overweight? Do you have hypertension or diabetes? Do you have any family member with this profile? If yes, was there something in the past that could have contributed to disease at a young age?

Your health today has its beginnings from the time you were in your mother's womb. Truth or myth?

There is clinical evidence to support that maternal conditions during fetal development can indeed affect your lifetime health and your susceptibility to diseases particularly heart disease, obesity, stroke, diabetes and the metabolic syndrome. The association between adult health and maternal environment was first postulated by Hale and Barker. It was Barker's original epidemiological study that found the likelihood of dying of heart disease to be 50 percent greater in men whose birth weight was less than 5.5 pounds, compared with men who were 9.5 pound babies. This led the authors to hypothesize that those who survived poor nutritional conditions during fetal development were more prone to disease later in life.

How can life in the womb affect health and disease in adult life? During development, there are critical periods of vulnerability to poor conditions which alter organ structure permanently. According to the fetal programming theory, the developing fetus responds to nutritional and oxygen shortages by diverting precious resources to the organ that needs it

most - the brain -- at the expense of other organs.

Two processes that underlie fetal programming are developmental plasticity and the thrifty gene theory. Developmental plasticity is the ability of an organism to develop in many ways to adapt to the environment. On the other hand, the thrifty gene hypothesis states that a baby adapts to an environment of limited energy but which results in poor coping ability to a life of abundance. A mismatch between earlier and later environmental factors leads to disease susceptibility.

A nutritionally challenged fetus is believed to grow a larger placenta as a means of securing more nutrients from the mother's blood. Thus, the two most obvious signs of fetal malnutrition are a low birth-weight baby and a disproportionately large placenta. However, an underweight infant -- if it survives - may have a liver that can't properly regulate cholesterol, a small pancreas predisposed to diabetes or a heart predestined to disease. Fetal malnutrition may lead to decreased skeletal muscle, more visceral fat, insulin resistance and a decreased kidney mass which is more prone to kidney malfunction and hypertension.

Supporting evidence for this includes a study among a Finnish older group of 500 men and women who were thin at birth and childhood and developed diabetes later in adult life after they have become overweight. In our own study of 163 young Filipino young adults

18-37 years old, we found that small birth weight less than 2500 grams was associated with diabetes mellitus and obesity.

If fetal undernutrition leads to disease susceptibility in adulthood, is it better to overfeed the growing baby? No. An excessive energy supply during fetal development has adverse consequences as well. There is a U-shaped correlation of nutrition and health with both ends of the U curve (undernutrition and overnutrition) associated with disease in later life. Maternal hyperglycemia (high blood sugar) as seen in gestational diabetes (diabetes in pregnancy) can lead to hyperinsulinemia, insulin resistance and fat deposition with large babies at birth. These infants of diabetic mothers are more susceptible to obesity, diabetes and the metabolic syndrome.

So what is the importance and implication of all these data? The evidence emphasizes that healthcare involves a lifetime course starting from the womb to adulthood. There is a need to educate potential parents on their responsibility in ensuring the health of future generations and ensure correct nutrition especially during fetal development.

To conclude, early developmental processes are defined by maternal environmental factors and genetic cell potential. These early processes determine patterns of lifestyle and non-communicable diseases in adult life. 

Gestational Diabetes: From HAPO to MiG, What next?

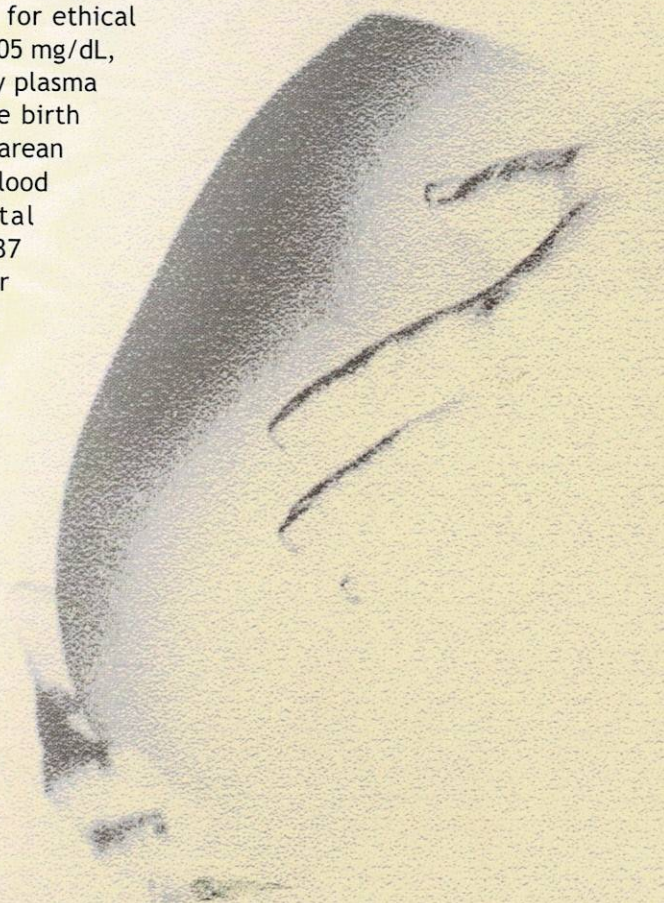
Iris Thiele Isip Tan, MD
Philippine General Hospital

Gestational diabetes is defined as glucose intolerance with onset or first recognition during pregnancy. While it is associated with significantly increased risks of adverse perinatal outcomes, the US Preventive Services Task Force ruled that there is insufficient evidence to assess the balance of benefits and harms of screening for gestational diabetes either before or after 24 weeks of gestation. This recommendation was based on a systematic review that found no randomized, controlled trials directly evaluating the risks and benefits of gestational diabetes screening and only limited evidence suggesting that treatment improves maternal and neonatal outcomes. While this may be valid, it can also be argued that the current diagnostic criteria for gestational diabetes were designed to identify those at high risk of developing diabetes after pregnancy rather than those at risk for adverse perinatal outcomes. Clearly, a study examining the risk of adverse maternal and neonatal outcomes associated with various degrees of maternal glucose intolerance was needed and such was the objective of the recently published Hyperglycemia Adverse Pregnancy Outcomes (HAPO) study.

In the HAPO study, 25,505 pregnant women in 15 centers in 9 countries underwent the 75-g oral glucose tolerance test (OGTT) between 24 to 32 weeks. To counteract the effects of caregiver bias (i.e. expectation of adverse outcomes due to gestational diabetes), OGTT results were only unblinded if the 2-hour plasma glucose level was diagnostic of diabetes (i.e. >200 mg/dL) or, for ethical and safety reasons, if the fasting plasma glucose level exceeded 105 mg/dL, the random plasma glucose level was 160 mg/dL or more, or any plasma glucose level was less than 45 mg/dL. Primary outcomes were birth weight above the 90th percentile for gestational age, primary cesarean delivery, clinically diagnosed neonatal hypoglycemia, and cord-blood serum C-peptide level above the 90th percentile (fetal hyperinsulinemia). Secondary outcomes were delivery before 37 weeks of gestation, shoulder dystocia or birth injury, need for intensive neonatal care, hyperbilirubinemia, and preeclampsia.

The HAPO results showed strong continuous associations of maternal glucose levels below those diagnostic of diabetes, with increased birth weight and increased cord blood serum C-peptide levels. There were no obvious thresholds at which risks increased. Significant but weaker associations were also observed for the secondary outcomes. The study was limited by the lack of data on nutritional status, gestational weight gain, previous gestational diabetes or macrosomia and maternal body mass index. Being observational, the study was also not designed to prove causality between maternal glycemia and the adverse outcomes seen.

What next after the HAPO? While this study has shown that perhaps diagnostic thresholds may need to be lowered for gestational diabetes, it does not provide evidence of benefit sought by the US Preventive Services Task Force. Clearly, it remains to be demonstrated in a clinical trial that treating

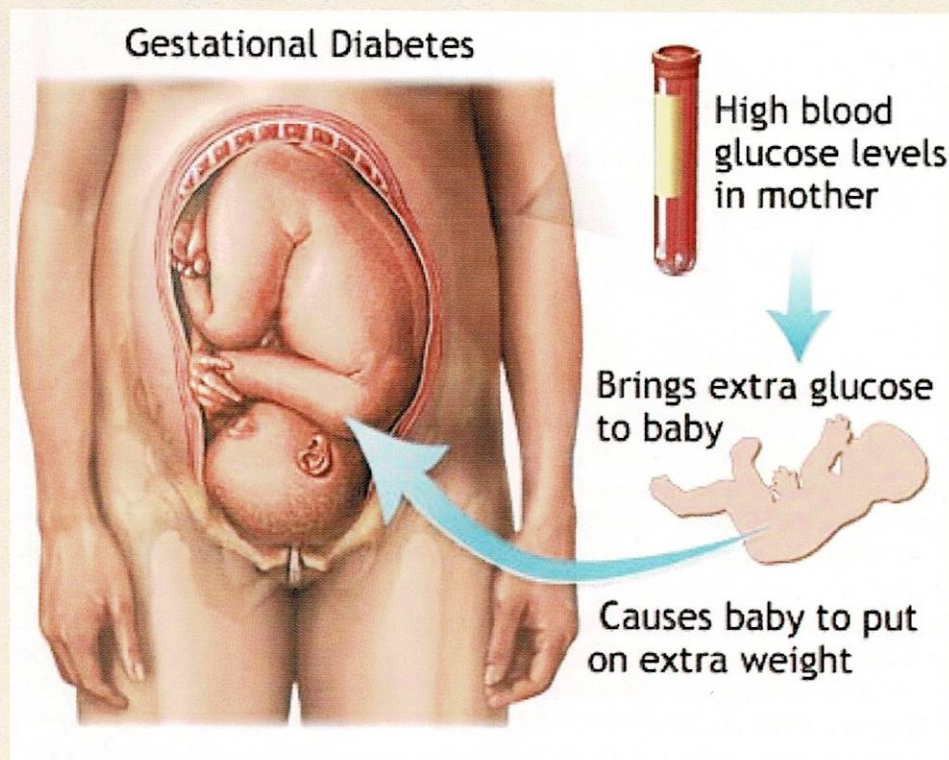


Of 363 women randomized to receive metformin, 92.6% continued to receive metformin until delivery, and 46.3% received supplemental insulin. The median daily dose of metformin was 2500 mg (interquartile range, 1750 - 2500 mg).

mild degrees of hyperglycemia below the current diagnostic thresholds for gestational diabetes, will translate to better maternal and neonatal outcomes. And as has been previously the case, lowering the diagnostic criteria for gestational diabetes will have to be resolved by consensus as there were no obvious thresholds at which risk of adverse outcomes increased.

Even as the diagnostic criteria for gestational diabetes remains an open question, a landmark trial demonstrating the relative safety of metformin in gestational diabetes has also been recently published. 4 The Metformin in Gestational Diabetes (MiG) trial which randomized women with gestational diabetes at 20 to 33 weeks of gestation to either metformin with supplemental insulin if needed or insulin alone was conducted in centers in New Zealand and Australia. The trial was designed to rule out a 33% increase (from 30% to 40%) in a composite endpoint of perinatal complications (neonatal hypoglycemia, respiratory distress, need for phototherapy, birth trauma, 5-minute Apgar score <7 or prematurity) in infants of women treated with metformin vs insulin.

Of 363 women randomized to receive metformin, 92.6% continued to receive metformin until delivery, and 46.3% received supplemental insulin. The median daily dose of metformin was 2500 mg (interquartile range, 1750 - 2500 mg). And while severe hypoglycemia (blood glucose levels < 1.6 mmol/L [28.8 mg/dL]) occurred significantly less often in infants of women taking metformin, there was no significant difference in the primary composite endpoint for infants of



women treated with metformin vs insulin (32.0% vs 32.2%). Not surprisingly, compared with women in the insulin group, more women in the metformin group stated that they would again choose to receive their assigned treatment (76.6% vs 27.2%; $P < .001$). While the frequency of preterm birth was greater in the metformin vs the insulin group, the authors were quick to point that difference was associated with a higher frequency of spontaneous (rather than iatrogenic) preterm births and that these could have occurred by chance although an unrecognized effect of metformin on the labor process cannot be ruled out. Nevertheless, the increased rate of preterm birth was not associated with higher rates of other complications.

While this was an open-label unblinded study, this limitation is offset by the trial's "real-world" setting in routine

clinical practice. The major methodologic limitation is the superiority design aimed to prove insulin was superior to metformin, where the non-significant difference in the primary outcome can only lead to acceptance (rather than proof) of the null hypothesis that there is no difference between the two treatments.

What next after the MiG trial? Metformin is a pregnancy category B medication, meaning that while it is probably safe for use in pregnant women, the full risks of metformin use in pregnancy are unknown. Hence, the follow-up data of the offspring of the MiG trial participants planned at 2 years of age will be needed before metformin can be safely recommended as a viable alternative to insulin in the treatment of gestational diabetes. **D**

Less shots with basal insulin analogues

Florence Amorado-Santos, MD
Batangas Regional Hospital



Insulin is a natural hormone produced by the pancreas. It is maintained in a basal level and secreted actively in a biphasic mode every time we eat a meal. This is how our body maintains euglycemia or normal blood glucose levels. However, diabetics lose this ability to maintain glucose homeostasis and usually would require a tablet (insulin secretagogue) to enhance endogenous insulin production or would need to have exogenous insulin injections if the pancreas is too exhausted to produce insulin.

There are different types of insulin adapted for different body needs, schedules and situations. Basal insulin may be taken alone or in combination with other types of insulin or oral medicines, as part of the overall diabetes treatment plan, including diet and exercise. Revolutionized diabetes management puts insulin as part of the more aggressive anti-diabetic regimen if lifestyle modification and oral medications fail to optimize glucose control. However, from a patient's perspective, the fear of having insulin shots especially if it would entail multiple injections would always spawn hesitancy if not resistance. Because in a person's mind, shots are shots and are equated with pain. And these are not just one time shots but one has to deal with it every single day.

BASAL INSULIN ANALOGUE - A NOVELTY OF ITS KIND

This is the long-acting type of insulin having a slow, steady release of insulin needed to supply energy to cells when no food is being digested. It is made by recombinant DNA technology (rDNA) and is chemically different from the insulin made by the human body and therefore, called an insulin analogue.

It begins to work anywhere from 1 to 10 hours after injections and can work for up to 24 hours giving your body insulin throughout the day and night.

It helps maintain normal glucose level in between meals and even during sleep. The time-course of action of insulin may vary in different people and at different times in the same person. The time-course of action of basal insulin just like the other types of insulin may also vary depending on the site where it is injected, one's body temperature, and physical activity. In hospitalized patients, insulin absorption is also affected by the fluctuations in blood pressure and other concomitant medications being administered during the treatment period. The route of injection for this insulin analogue is only subcutaneous (under the skin) and should not be administered intramuscularly or intravenously. Its formulation does not allow it to be given through the muscle or through the veins unlike the other insulin preparations.

There are two basal insulin analogues available here in the Philippines. The first that came out was Glargine (Lantus) by Sanofi-Aventis, followed by Detemir (Levemir) by Novo Nordisk.

GLARGINE (LANTUS)

Insulin glargine is a designer insulin produced by recombinant DNA technology utilizing a non-pathogenic laboratory strain of *Escherichia coli* as the production organism. Glargine is a clear colorless solution with an acidic pH (pH 4). Upon subcutaneous injection, the acid in the vehicle is neutralized and glargine precipitates, thereby delaying its absorption and prolonging its action. This insulin is a clear solution making it advantageous in clinical practice. The patient doesn't have to shake the vial prior to its use leading to a less inter-individual variability in terms of metabolic effect induced. It is also likely that a clear solution will have a more even distribution in the subcutaneous tissue before it precipitates, hence, lesser variability in its absorption.

When compared with other types of insulin which show early peak of action, glargine has flat and prolonged curves of insulin action. This peakless mode prevents the occurrence of hypoglycemia which usually occurs in the evening referred to as nocturnal hypoglycemia. Different prospective, randomized trials have shown varying

results comparing glargine with the existing long-acting and intermediate-acting insulin in terms of control of fasting plasma glucose and glycosylated hemoglobin. But most prominent in the data is the lesser occurrence of hypoglycemic episodes attributed to glargine's peakless and constant profile of action. This property is highly suitable for providing basal insulin requirement for patients with either Type 1 or Type 2 diabetes.

Glargine had been linked to some mutagenic potential which can be a possibility for any insulin product since changes in its structure and the way it would interact with endogenous insulin and insulin growth factor receptors would be contributory. The clinical relevance of this observation of increased mitogenicity for glargine compared to human insulin remains to be determined.

Insulin glargine is in the FDA pregnancy category C. This means it is not known whether it will be harmful to an unborn baby. Do not use this medication without first talking to your doctor if you are pregnant or could become pregnant during treatment. It is not known whether insulin glargine passes into breastmilk. Do not use this medication without first talking to your doctor if you are breastfeeding a baby. Do not mix or dilute glargine with any other insulin or solution. There had been no studies regarding the use of glargine in pediatric patients < 6 years old.

LEVEMIR (DETEMIR)

Another long-acting basal insulin analogue produced by a process that includes expression of recombinant DNA in *Saccharomyces cerevisiae* followed by chemical modification. It is a clear, colorless, aqueous, neutral sterile solution, with pH of approximately 7.4.

Insulin detemir is a soluble, long-acting basal human insulin analog with a relatively flat action profile. The mean



duration of action of insulin detemir ranged from 5.7 hours at the lowest dose to 23.2 hours at the highest dose.

The prolonged action of levemir is mediated by the slow systemic absorption of insulin detemir molecules from the injection site due to strong self-association of the drug molecules and albumin binding. Insulin detemir is distributed more slowly to peripheral target tissues since insulin detemir in the bloodstream is highly bound to albumin. Levemir is not intended for intravenous or intramuscular administration. The prolonged duration of activity of insulin detemir is dependent on injection into subcutaneous tissue. Intravenous administration of the usual subcutaneous dose could result in severe hypoglycemia. Absorption after intramuscular administration is both faster and more extensive than absorption after subcutaneous administration. It should not be diluted or mixed with any other insulin preparations.

The efficacy and safety of levemir given once daily at bedtime or twice daily at 12-hour interval compared to intermediate acting insulin and insulin glargine among many subjects showed similar glycemic control levels as measured by their glycosylated hemoglobin.

As of 2007, standard 2-year carcinogenicity study in animals was not yet performed for levemir. In pregnancy, the use of levemir is category C and fertility and embryonic

development study showed that doses in approximately 135 times the recommended human dose, there had been data on visceral anomalies, increases in fetuses with gallbladder abnormalities and missing gallbladders. However, human insulin had showed similar effects regarding embryotoxicity and teratogenicity. Patients who are breastfeeding may require adjustments in insulin dose, meal plan or both. The amount of levemir secreted in breastmilk is still unknown. Like glargine, insulin levemir is used for both Type 1 and Type 2 diabetes, patients should be > 6 years old.

GLARGINE AND LEVEMIR: BOTH REACHING FOR THE GOAL

These two basal insulin analogues may have different derivations chemically but the goal for both remains at target, prevent diabetes complications through good glucose control. Glargine and levemir work in perfect harmony if used with any of the human insulin or any oral hypoglycemic. They are both used as basal doses and can be given in the morning or evening as single dose. Same precautions apply for the use of these analogues in terms of occurrence of adverse events such as hypersensitivity, hypoglycemia, pruritus (itching), rashes and injection site reactions.

The evolving concepts in diabetes management and the more accepting attitudes of patients towards starting insulin are both geared towards better glucose control, long term. With novelty insulin like the basal analogues which can be administered once daily and yet can give comparable results with other types of regimen in terms of glucose control, patients now have an additional option once insulin shots are prescribed. The transition from oral agents to insulin injections may not anymore be a dreaded truth that diabetics have to deal with since a once-daily injection is now at hand.

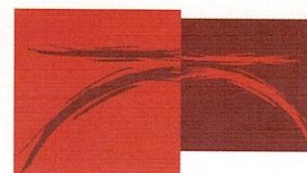
Having one shot daily may not really hurt that much, after all. **D**



International Diabetes Federation
Avenue Emile De Mot 19
B-1000 Brussels, Belgium

telephone 32-2-538 5511
telefax 32-2-538 5114

www.idf.org
media@idf.org



BRIDGES

PRESS RELEASE

Brussels/Manila - April XX, 2008

International Diabetes Federation grant supports diabetes self-management education program in the Philippines

The International Diabetes Federation (IDF) BRIDGES translational research grant program will fund a pilot study in the Philippines that will offer culturally appropriate and improved diabetes care in rural communities using local health workers.

The community-based study, Diabetes Self-Management Program (DSME), will help Filipinos with diabetes to acquire the knowledge, self-care practices, and attitudes required for the effective management of their diabetes. The Section of Endocrinology, Diabetes, and Metabolism of the University of the Philippines - the Philippine General Hospital will launch the pilot study in San Juan, Batangas, Philippines.

"The IDF BRIDGES Research Grant will be instrumental in making this ambitious community-based diabetes program a reality. This pilot study is part of a long-term, self-sustaining, comprehensive diabetes program which aims at reducing the burden of diabetes and aspires to be a 'model of community diabetes care' throughout the country, ultimately attenuating disparities in health outcomes for underserved Filipinos in the rural community," said Dr. Gregory A. Ardena, study co-investigator.

The Federation, through BRIDGES, is committed to converting research findings into useful practices for the provision of quality care and services delivered by healthcare providers. The diabetes education program in the Philippines, along with the 10 other selected translational research projects, was chosen because of its innovative idea, demonstration of the potential for health care cost savings, sustainability plans and the opportunity for its results to be widely replicated in other settings.

The education program will offer culturally-appropriate, comprehensive diabetes education by using locally adapted educational materials, with the support of Barangay Health Workers (BHW) as health educators. The pilot study is part of a long-term, self-sustaining diabetes program which aims at reducing the burden of diabetes by improving self-care and behaviour.

"The Filipino Diabetes Self-Management Program goes to the heart of what the International Diabetes Federation BRIDGES program aims to achieve," said Linda Siminerio, Chair of the IDF BRIDGES Review Committee. "This program has the potential to improve the lives of people living with diabetes and increase diabetes knowledge among the Barangay Health Workers who will now have the capacity to support quality care."

The International Diabetes Federation independently manages the BRIDGES program with an educational grant from Eli Lilly and Company and is committed to promoting diabetes care, prevention and a cure worldwide. 

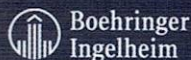
(This research project is being carried out by the UP-PGH Section of Endocrinology Diabetes and Metabolism with Section Chief Dr. Elizabeth Paz-Pacheco as principal investigator.)

ONTARGET®

The Landmark Trial in Cardio and Vascular Protection

The Results

- Telmisartan 80mg is as protective as ramipril 10mg in reducing CV death, MI, stroke, and CHF hospitalization
- Telmisartan treatment is better tolerated than ramipril, and has a higher compliance rate



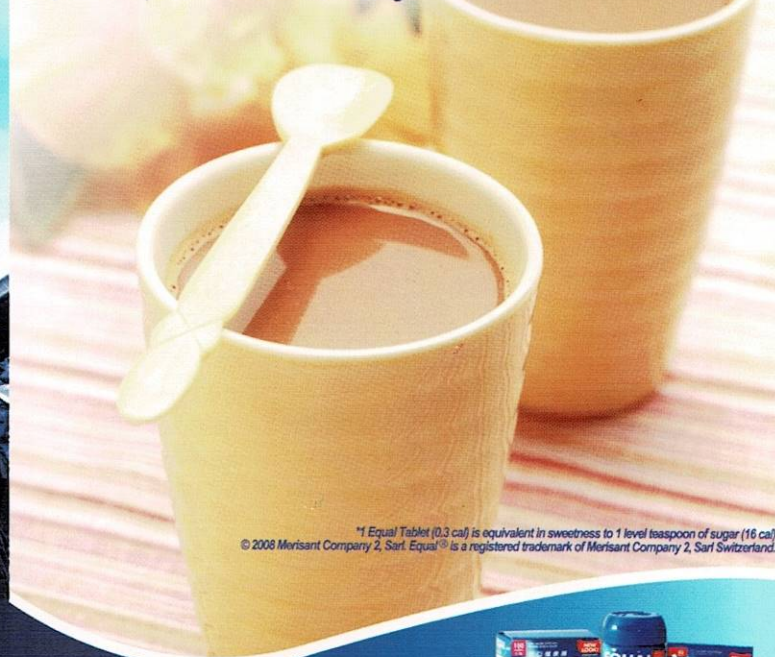
TELMISARTAN
MICARDIS
40mg/80mg Tablets



The sponsor of ONTARGET® is Boehringer Ingelheim, the co-funder in the Philippines is GlaxoSmithKline. Reference: The ONTARGET Investigators. Telmisartan, Ramipril or Both in Patients at High Risk for Vascular Events. N Engl J Med 2008; 358:1547-59.

Do it for *yourself*,
Do it for your *coffee*.

Enjoy sweet goodness minus the calories with EQUAL® Low Calorie Sweetener. Equal® has up to 97% less calories than sugar.*



*1 Equal Tablet (0.3 cal) is equivalent in sweetness to 1 level teaspoon of sugar (16 cal)
© 2008 Merisant Company 2, Sart. Equal® is a registered trademark of Merisant Company 2, Sart Switzerland.

EQUAL®

great taste... minus the calories



Amlodipine besylate

Vasalat

5 mg • 10 mg Tablet

US FDA APPROVED
THERAPEUTIC EQUIVALENT

Price Comparison: Mercury Drug*

BRAND	GENERIC NAME	5 mg	10 mg
VASALAT	Amlodipine BESYLATE	13.50	22.00
Innovator Brand	Amlodipine besylate	44.75	74.75
Brand A	Amlodipine camsylate	17.50	—

*As of October 2007

- Proven in hypertension management
Vasalat is Amlodipine BESYLATE
- The ^{only} US FDA approved therapeutic equivalent available in the Philippines
- Save as much as 70%

QUALITY + AFFORDABILITY = GLUCOSCREEN

Best mark down price!!!
Starter Kit*

@

P 1,980.00

(Each Glucose Strips Cost P27.00 only)



* Inclusions:
1 Glucometer • 25 Strips • 25 Lancets • 1 Lancing Device

BLUE CARE Plus Glucoscreen GCM 1000,
Best Blood Glucose Self-Monitoring System with:

- Lifetime Warranty
- Easy to Use
- Built in Coding System
- Store up to 450 Readings with Date and Time
- Result within 10 seconds
- Free Delivery

Promo Period until September 30, 2008



GLUCOSCREEN GCM 1000

Live your life to the fullest and remain stress free.

For more inquiries: Call Customer Service @ 687-9999



PATRIOT
Pharmaceuticals Corp.

The Patriot Building Building, Km. 18 West Service Road South Luzon Expressway,
Paranaque City 1700 Philippines
Tel: 821.7382, 776.2001-09, 776.1182-83 • Fax: 821.7383 and 776.1181
www.natrapharm.com
Full prescribing information upon request



Diabetes and Exercise

Angelica Del Mundo, PT
Manila Doctors Hospital

It's no secret that Exercise is key to controlling Diabetes Mellitus - and many doctors already urge their diabetes patient to get active.

Exercise has the potential to control the diabetes by nonmedical means, reduce the severity of the disease, and significantly reduce the risk of long-term complications.

Can Exercise Help?

Aerobic exercise increase insulin sensitivity and, along with proper nutrition, helps restore normal glucose metabolism by decreasing body fat. Exercise and good nutrition provide real physical payoffs—they are essential to controlling diabetes. Exercise can help prolong your life and improve the quality of life. It also helps control weight, lowers blood pressure, lowers cholesterol, cuts the risk of heart attack, strengthens your immune system, eases arthritis pain, protects against osteoporosis, fends off some forms of cancer, keeps your thinking sharp in old age, and even brightens your mood.

What kind? How much exercise is enough? How often?

Low-impact exercise such as walking or stationary cycling is recommended, along with enough exercise to promote weight management. The goal should be to exercise five times per week, up to 40-60 minutes per session at a moderate intensity. This level of exercise can be reached gradually, starting as low as 10-20 minutes a few times a week for a person who has never exercised. Remember to increase only one factor at a time (days per

week, length of session, or intensity).

Strength training also decreases body fat by raising the lean body mass and metabolism. Its main benefit, however, is increasing glucose uptake by the muscle and enhancing the ability to store glucose. A basic recommendation from the American College of Sports Medicine is to train a minimum of two times per week, doing 8-12 repetitions per sets of 8 - 10 exercises targeting major muscle groups. Safety precautions must be followed for the exercising diabetic. A personal trainer can help to set up a program for the Type 2 diabetic and help them exercise correctly. With your doctor's permission, exercise bands a safe, simple and effective way to exercise at home.

10 Exercise Checklist & Guidelines

1. Check your blood sugar level before and after exercising (blood glucose less than 250 mg/dl).
2. Take your blood - glucose level at least every 20-30 minutes during your workout. After your workout eat a complex carbohydrate snack (starchy food). Don't exercise if blood glucose level is below 100 mg/dl or you don't feel right.
3. Check your feet for blisters or sores before and after exercising.
4. Wear proper shoes and absorbent socks.
5. Start out easy and gradually increase intensity and duration.
6. Warm up or stretch before and cool

down after you moderate intensity workout. Sufficient warm up and cool down will help to prevent heart problems as well as make you less susceptible to injury.

7. Don't exercise out doors on very hot or humid days. You can get heat exhaustion or heat stroke.

8. To prevent dehydration, drink a cup of cold water before and after you exercise. And Have a snack handy in case your blood sugar level drops too low.

9. If you exercise longer than 30 minutes or are sweating a lot, drink water during your workout.

10. Know the warning signs of heat problems: chest, arm or jaw pain, nausea, dizziness or fainting (also signs of heat exhaustion or hypoglycemia), unusual shortness of breath during exercise, irregular pulse.

Covering All the Bases

When you decide to start exercising, it's easiest to do something you already know how to do. That's why walking is a good first step. But a well - rounded physical activity program includes other elements as well. The major exercise groups are:

- Endurance exercise, such as a brisk walking, bike-riding, dancing, stair-climbing, or even heavy yard work. These pump up breathing and heart rate, increase energy, build stamina, and improve heart health.
- Strength or resistance exercises, such as weightlifting, weight-pushing, or resistance-band stretching. These help tone muscle, build muscles, improve bone health, and reduce the risk of falling.
- Stretching exercise, such as side hip rotation or trying to touch your toes. These improve flexibility and freedom of movement.
- Balance exercises, such as side leg raising or standing on one foot for as long as you can. These are particularly important for seniors.

References:

American Diabetes Association, American College of Sports Medicine, Simple Fitness Solutions, © 2003-2008 Medical College of Wisconsin

When Diabetes Gets Into Your Nerves: Neurological complications of diabetes

Paul Matthew Pasco, MD
Philippine General Hospital

People with uncontrolled diabetes often have episodes of hyperglycemia or increased levels of sugar in the blood.

This can lead to increased deposits of fatty materials on blood vessel walls (atherosclerosis), as well as to direct damage of nerves throughout the body. This is how diabetes gives rise to complications affecting the nervous system, which is a significant part of the medical problems of diabetics.

The most common neurological problem in persons with diabetes is diabetic neuropathy, which is due to decreased blood flow to the nerves and direct damage by high blood sugar levels. On average, the beginning of symptoms occurs 10 to 20 years after diabetes has been diagnosed. About half of people with diabetes will eventually develop nerve damage. Peripheral neuropathies affect the nerves which exit from the brain and spinal cord, and are characterized by tingling sensations or numbness, which can then lead to severe tissue injury as patients no longer feel pain which can alert them to injury. Autonomic neuropathies affect the nerves that regulate vital body functions. Symptoms such as dizziness, bowel and bladder disturbances, and impotence can be due to this type of neuropathy. The neurologist may perform a physical examination such as checking a person's sensation and reflexes, and also order for a nerve conduction test in order to verify a diabetic neuropathy. Treatment consists of medications such as gabapentin, pregabalin, or carbamazepine in order to reduce the symptoms, and of course intensive control of blood sugar levels. Patients should remember to always examine



their feet in order to detect early tissue damage.

Diabetes can also affect the blood vessels supplying the brain, leading to a stroke. A stroke results when the brain's blood supply is suddenly cut

off, which can occur when a blood vessel is blocked or bursts. Brain cells are then deprived of oxygen and die. This leads to loss of function in that part of the brain, which can take the form of weakness, unsteadiness, loss of vision, or trouble talking or understanding. If the blockage is temporary, this is called a transient ischemic attack, or TIA. If you suddenly experience any of these symptoms, you should consult at a hospital right away so that immediate treatment can be given. This includes medicines to dissolve the clot and reduce brain swelling. Lastly, another important complication of diabetes in the nervous system is diabetic retinopathy, or damage to the retina due to blockage of the

blood vessels and accumulation of fatty material. This leads to progressive loss of vision.

These complications of diabetes can be prevented by rigorous control and monitoring of blood sugar levels and by appropriate treatments when these complications do occur. Moreover several researches are ongoing to determine other ways to maintaining the health and well-being of diabetics. **D**

The Lighter side of Diabetes by Dr. Allan Hernandez



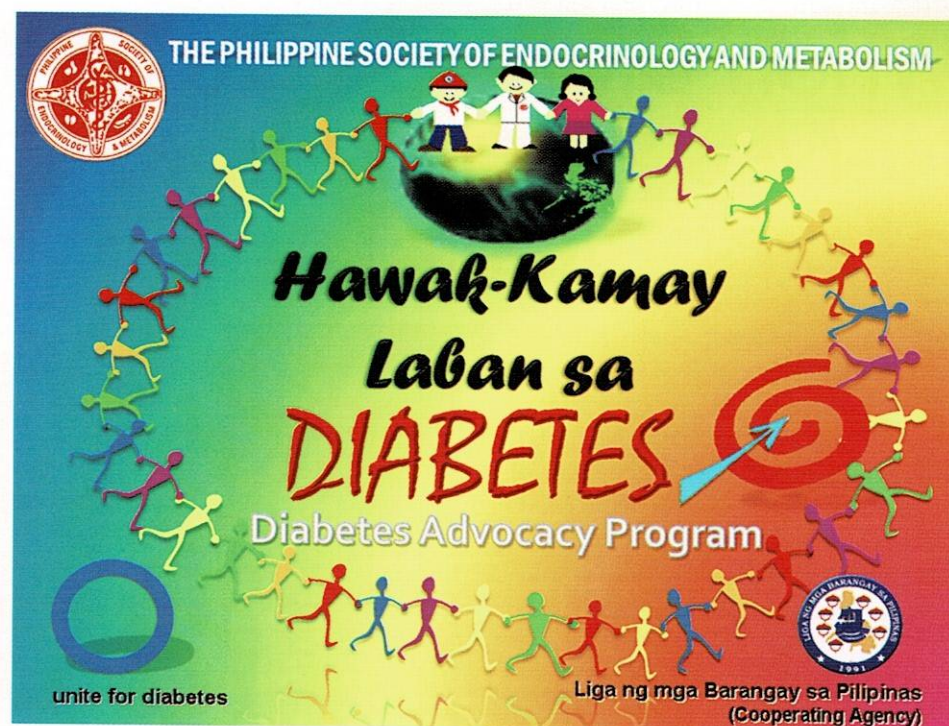
HAWAK KAMAY LABAN SA DIABETES: *PSEM's Diabetes Advocacy Program*

Laura T. Acampado, MD and
Gabriel V. Jasul, Jr., MD
*Philippine Society of Endocrinology and
Metabolism*

Cognizant of the impact of the increasing prevalence of diabetes mellitus worldwide, the Philippine Society of Endocrinology and Metabolism (PSEM) continues its steadfast commitment through its advocacy programs to 1) raise public awareness about diabetes mellitus and 2) to promote public health strategies aimed at not only the early diagnosis and treatment, but more important, toward the prevention of diabetes mellitus. In developing countries like the Philippines where health resources are scarce, the significance of prevention as the best treatment of diabetes mellitus cannot be overemphasized. The International Diabetes Federation's most recent statement is clear in its recommendation for diabetes prevention measures targeting both people at high risk of developing the disease and the entire population.

In this current milieu, the PSEM is intensifying its public awareness campaign on diabetes by forging alliances with grassroots health organizations focusing on effective preventive strategies.

Last year, on the 12th of July, the PSEM and the PSEM Advocacy Committee launched its Diabetes Advocacy Program. Our guests of honor were



the esteemed Prof. Martin Silink, President of the International Diabetes Federation (IDF) and Mr. James Marty Lim, the youthful president of the Liga ng mga Barangay. The theme for the PSEM Diabetes Advocacy program was "HAWAK KAMAY LABAN SA DIABETES", translated as WORKING TOGETHER AGAINST DIABETES, which succinctly summed up the goals and the activities of the PSEM in making an impact in curbing the diabetes epidemic.

The PSEM conducts diabetes lay fora in the different hospitals and clinic throughout the country where our PSEM members practice. Simultaneous blood sugar and health screening are part of the program. This year, these lay fora, blood sugar checks and health screening activities will be continued nationwide. Last year, diabetes lay lecture modules were made available in CD format for use by PSEM members in their areas of practice. Similarly, diabetes lecture modules intended for primary care physicians and other health professionals were distributed to augment PSEM-led continuing education on diabetes for these health professionals. Educational materials

on diabetes mellitus were also made available for distribution to patients for free. This year, we will continue to conduct lay fora for a nationwide and make available educational materials for our colleagues and patients.

A major addition to the PSEM's Diabetes Advocacy Programs is the PSEM DIABETES WARRIOR PROGRAM which we continue to pursue. This program is the centerpiece of PSEM's commitment to our diabetes awareness and prevention campaigns and embodies the PSEM's network of alliances. The main objective of the PSEM Diabetes Warrior Program (PSEM-DWP) is to promote diabetes awareness and prevention at the community level through the barangay, the basic political unit in Philippine society. The specific objective is to implement a long-term, self-sustaining diabetes prevention program involving the grassroots health workers, the Barangay Health Workers (BHWs). Initially, the cooperating organization for this undertaking is the Liga ng mga Barangay sa Pilipinas, which represents the 42,000 barangay units throughout the country. These barangays are organized into 120 chapters and have

functions and responsibilities in eight key service areas namely: health care and well-being, food security and well-being, water and environmental protection, shelter, livelihood, peace and order, education and literacy and participation in governance. The key area of health and well-being will be the setting for PSEM's collaboration with the Barangay organization since this key area directly involves the Barangay Health Workers and the Barangay Health Units (BHU).

The BHWs are community volunteers in their specific barangays/communities tasked to carry out barangay health programs through the BHUs and with help from other barangay volunteers such as barangay nutrition scholars, and the like. The BHWs therefore, represent an organization of individuals already involved in primary health care at the most basic grassroots level and as such, are a pool of health advocates who can be trained on diabetes prevention and screening methods. The PSEM will provide the logistics for diabetes prevention and screening modules and support for glucose screening in identified areas. Training and certification of BHWs on diabetes modules will be supervised by PSEM members nationwide. We will continue to train and certify BHWs this year. PSEM will be responsible for obtaining funding for the launching and initial expenditures. Continuing manpower support for training the BHWs will also be the PSEM's responsibility.

A patient registry system will be put in place to monitor the number of individuals seen and and screened by these BHWs, also to be known as PSEM Diabetes Warriors and to maintain a log of progress report of these individuals on subsequent screening and/or encounter with the BHWs. A referral system will be designed to address the management of individuals identified as having prediabetes or diabetes. The recording system and data from this registry will be a veritable source of information for

future PSEM research activities. The organization of the BHWs and the Liga ng mga Barangay will be responsible for the cascading this program from the national to regional to provincial to municipal/city down to the barangay level. A method of sustaining the resources (e.g. Blood glucose meters and strips) will be designed as part of our long-term plans.

Future alliances are in progress and these include collaboration with the Association of Municipal Health Officers of the Philippines and the Integrated Midwives Association of the Philippines. Both organizations also closely work with the Liga ng mga Barangay sa Pilipinas on community health programs at different levels.

For this year, cascade options that are being considered include: 1) telemedicine modules (another exciting new project!), for which partnership and collaboration with the National Telemedicine Center of UP Manila is under discussion, 2) simultaneous sessions with BHWs during lay fora and 3) train-the-trainers program in strategic cities nationwide.

The chair of the PSEM Advocacy Committee will be attending the IDF translational workshop to be held on September 25, 2008 in Hong Kong. This will hopefully help in improving the design of the PSEM's Hawak Kamay Program as a diabetes prevention program. Consequently, this will strengthen the potential of this worthwhile diabetes advocacy program as a research project that will merit funding from national as well as international agencies.

There is still more to be done and more to look forward to. Unfazed by the formidable challenge, the PSEM is committed to pursue its Diabetes Advocacy Program to make our theme "HAWAK KAMAY LABAN SA DIABETES" not a mere tag line but a reality soon.



PDA 2008 SCHEDULE OF ACTIVITIES



35th DiabetesWorkshop

The Legend Palawan
March 14, 2008 (Friday)

Coordinators:

Dr. Editha Arceo-Dalisay
Dr. Belinda Palao
Mr. Ammiato Bacus

36th DiabetesWorkshop

Hotel Roma, Tuguegarao
May 9, 2008

Coordinator:

Dr. Elizabeth Paz-Pacheco
Dr. Magnolia Reyes
Ms. Maripee Genato

Unite for Diabetes

Century Park Hotel, Manila
July 17 - 18, 2008

PDA Annual Convention and 50TH PDA ANNIVERSARY

Theme: PDA turns Gold

Crowne Plaza Galleria Manila,
Quezon City

November 11 - 12, 2008
(Tuesday & Wednesday)

Coordinator:

Dr. Editha Arceo-Dalisay

PDA Lay Annual Convention / GIMIK DIABETES and World Diabetes Day Celebration

November 15, 2008 (Saturday)

SM Megamall, Cinema 4
Time: 1:00 - 6:00 pm

4th Course on Diabetes and Vascular Disease

Century Park Hotel, Manila
December 2 - 3, 2008
(Tuesday & Wednesday)

KITCHEN CORNER

HEALTHY EATING FOR TWO

Ma. Imelda Q. Cardino, MSFN
Makati Medical Center (Diabetes Clinic)

"I'm pregnant!"... the mother-to-be usually jubilantly declares to one and all... whether it be for the first time... or the nth time. However, any laboratory result that deviates from the normal brings about a feeling of anxiety, uncertainty, sometimes disbelief... even fear..... until she learns what can be done to "normalize" these.

The attending physician tries to reassure the patient and will, most likely, refer her to a support team for a more detailed instruction. If the woman needs medical nutrition therapy to control blood glucose levels then she is referred to a clinical dietitian likely based in a hospital for an individual dietary plan. If this is not possible, then the following general tips might help.

• **Generally, too oily, too fatty, and too salty foods need to be avoided.**

Those with significant amounts of sugar or its equivalent such as honey, molasses, syrup, and others need to be avoided as well.



CONSOMME (SOUP) WITH ASSORTED VEGETABLES

• **Enjoy liberal amounts of vegetables:** all leafy and green; vitamin-rich like tomatoes ("kamatis")/ swamp cabbage ("kangkong")/ sweet potato leaves



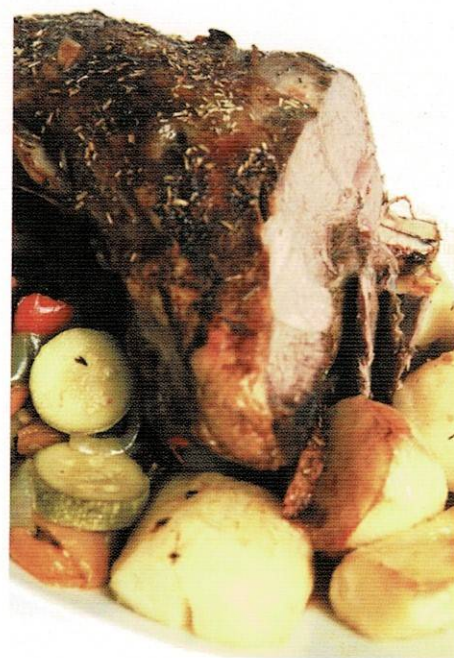
("talbos ng kamote")/ bitter gourd ("ampalaya"); fiber-rich like pigeon pea seed ("kadyos, buto")/ cowpea pod ("paayap bunga")/ snap bean ("habichuelas").

• **Fruits are carbohydrates known as "DISACCHARIDES"**... meaning they are simply made up of two units: glucose and fructose. Therefore they are quickly digested to yield glucose specially if eaten by itself (meaning as a snack item or not eaten as part of a major meal). However, even if fruits are eaten as part of a major meal but more than one portion is taken, it is not surprising to get a high glucose reading after that meal.

• **Fiber is important, whether soluble or insoluble.** Gelatin and "gulaman" are examples of soluble fiber while fruit pulp and vegetable stalks are examples of insoluble fiber. A study called "glycemic index" suggest that refined food items cause a higher glucose rise than unrefined foods (those with skin, bran, etc). Therefore, if the juice is extracted from the fruit (a disaccharide) and the pulp discarded, a higher glucose reading after the meal is to be expected. This is because of the refinement of the food item. Simply put, it is a better choice to eat the fruit with its edible skin and seeds intact rather than

extracting the juice and discarding the pulp.

• **Lean is in.** It has been said over and over that protein-food choices should be lean and trim. This means that



visible fat should be removed (skin, oily or fatty parts)

• **Regularity of meal intake is essential.** A regular meal pattern is important in stabilizing blood sugar. Pregnant women should not be without food for longer than 8 hours unless a procedure requested by the physician will require so. Hence, a bedtime snack is very important to cut the distance between dinner and breakfast of the next day. If the lunch meal and dinner meal are significantly apart then a mid-afternoon snack may also be necessary. Aside from a complex carbohydrate for snack (whole wheat bread, noodles, root crops, etc.) a

Maintaining your blood sugar within acceptable levels might be a little inconvenient for a seemingly veeeery long time... but... when you see your reward of a healthy and bubbly bundle of joy..... all these effort of yours are really more than worth it

portion of lean meat may be included as well as leafy vegetables.

• **If you are a milk-drinker**, go for low fat or skim. Or go for unsweetened soy milk. Avoid those with chocolate



flavor and definitely those with sugar added.

• **Some artificial sweeteners are considered safe for use in pregnancy. However, it is better that you ask your doctor for guidance as to kind and amount.** Usually the kinds allowed are aspartame and sucralose in moderation.

• **Artificially-sweetened food and**



drink contain blends of artificial sweeteners... meaning they may contain two or more different kinds of artificial sweeteners. Again it is best that you ask your doctor or your healthcare provider for guidance and advice.

• **Drink a lot fluids.** Water is the best. If you can tolerate fresh, dilute, unsweetened kalamansi juice then include it in your meal plan (or add artificial sweetener if you are allowed some).

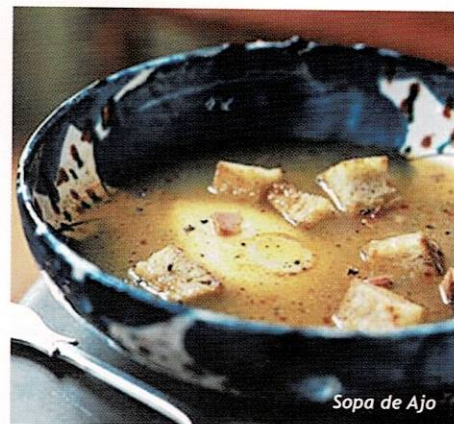
• **Monitor your blood sugar.** Ask your doctor for guidance as to frequency. However, it is helpful if you record the food you ate along with the record your glucose readings since it will help you in the interpretation of your results. Individuals respond differently to varied foods so you will see which specific foods give you better glucose results.

• **Definitely the best choice is to have an individual meal pattern prepared for you.** All these recommendations are general. It is still best if a clinical dietitian can prepare a pattern specially prepared for you according to the doctor's dietary prescription.

• **When eating out:**

Select foods prepared with the least amount of fat or oil. It does not mean that because olive oil is used, the food may "swim" in olive oil.

Choose simply-prepared items on the menu: baked, steamed, broiled, boiled main courses are better choices. Of course watch out for "rich" (like gravy) or sugary sauces (like sweet and sour as well as teriyaki) since they should be avoided.



Do not go for "package meals" or "value meals". Such meals will not allow you flexibility. You will not be able to choose wisely as they come as a set.

Go for foods with more fiber in them: potato baked in jacket (WITHOUT TOPPINGS), brown rice, whole grain cereals, root crops as carbohydrate sources.

Go for fresh garden salads since they are filling. Wisely choose your dressing: vinaigrette, balsamic vinegar dressing, Italian dressing are some choices. If you are calorie-counting then be aware of their equivalents in your meal pattern.

Take some soup. Go for the both-type like "SOPA DE AJO", "TOFU-VEGETABLE SOUPS", etc. Meaning, do not choose the creamy type or thick soups since they will be higher in calories... and most likely fat.

Maintaining your blood sugar within acceptable levels might be a little inconvenient for a seemingly veeeery long time... but... when you see your reward of a healthy and bubbly bundle of joy..... all these effort of yours are really more than worth it!



From **past discoveries**
to a **promising future...**



1921
Dr. Frederick Banting,
together with his medical student assistant,
Charles Best, discovered insulin,
a profound medical discovery
at that point in time.

1922
J.J.R. Macleod,
from the University of Toronto
and Dr. G.H.A. Clowes,
from Eli Lilly and Company,
agreed to collaborate on
the mass production of insulin.

1923
Patient J.L. (age 3),
on December 15, 1922,
before he received insulin,
weighed mere 15 pounds.

Patient J.L.,
on February 15, 1923,
two months
after taking insulin
for the first time,
and nearly
doubled his weight
to 28 pounds.

The first insulin vials and first U-20 and U-40
formulations were packaged in wooden containers.

2006
Lilly launches
INSULIN LISPRO
20% rapid-acting and 80% long-acting insulin
in the Philippines.

1996
Lilly launches
INSULIN LISPRO (DNA origin)
the first insulin analog
in the Philippines.

1992
Lilly launches
INSULIN HUMAN (DNA origin)
70% ISOPHANE/30% REGULAR
Humulin 70/30
in the Philippines.

1986
Lilly launches
ISOPHANE HUMAN INSULIN (DNA origin)
Humulin N
and
REGULAR HUMAN INSULIN (DNA origin)
Humulin R
the first rDNA human insulin in the Philippines.

BYET-07-07-0038

Trust the Original

Lilly

ELI LILLY (PHILIPPINES), INC.
32/F Wynnham Corp. Plaza, Emerald Ave.,
Ortigas Center, Pasig City

Avandamet™
provides durable control
for type 2 diabetics
so they can **carry on.**

Rosiglitazone Maleate
Metformin HCl

Avandamet™
DURABLE POWER OF TWO



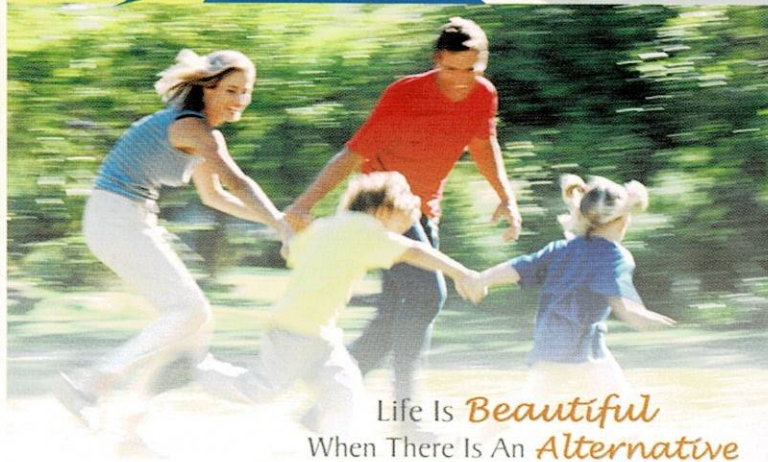
gsk
GlaxoSmithKline

Recombinant Human Insulin

SciLin™

The Lifeline You Can Trust

INTRODUCING
NEW
Insulin Analogues



Life Is **Beautiful**
When There Is An **Alternative**

- ✓ Recombinant Human Insulin
SciLin™ R showed similar profile to Brand "A"
- ✓ Recombinant Human Insulin
SciLin™ N is biologically equivalent to Brand "HN"
- ✓ Recombinant Human Insulin
SciLin™ M30 is biologically equivalent to Brand "H 70/30"

Recombinant Human Insulin
SciLin™

Insulin is a hormone that regulates blood sugar levels. It is essential for the body to use glucose for energy. People with diabetes have a problem with insulin. They either do not produce enough insulin or their cells do not respond to it properly. This can lead to high blood sugar levels, which can cause serious complications if not treated. Recombinant human insulin is a synthetic version of the natural insulin hormone. It is made using genetic engineering techniques. It is identical to the natural insulin hormone and is used to treat diabetes. SciLin is a brand of recombinant human insulin. It is available in various formulations, including rapid-acting, long-acting, and premixed insulins. SciLin is a safe and effective treatment for diabetes. It helps to keep blood sugar levels under control and prevent complications. For more information, please consult your doctor.

SciGen
Manufactured by BIOTON S.A.
Vancouver, Canada
For SciGen Ltd., Singapore
Imported and Distributed by
Medi-Drug Inc.
Makati Ave., Bagumbayan
Taguig, Metro Manila



Real OD Power
pioglitazone
actos™ 15 mg & 30 mg tablet



Beyond glycemic control...

VOGLIBOSE
BASEN® 120 mg & 240 mg tablet

Control the Peak... Reduce the Risk...
At Less Cost.

Candesartan Cilexetil

BLOPRESS®
8mg & 16mg tablet

Candesartan Cilexetil +
Hydrochlorothiazide

BLOPRESS® PLUS
16mg/ 12.5mg tablet



Full prescribing information see product insert

Takeda
BOE-TAKEDA CHEMICALS, INC.
12F Sky Plaza Bldg., Orchard Square
6788 Ayala Ave., Makati City Philippines
Tel: 886-0954 to 61 Fax: 886-0945

PDA: A PREVIEW OF 50 YEARS

Tommy S.Ty Willing, MD
Metropolitan Hospital



The organization endeavors to foster and support research on the prevention and care of diabetes mellitus, including cooperation with relevant government agencies.

THE BEGINNING

In 1958, a group of internists and devoted physicians committed to the care, protection and recuperation of the people with diabetes banded together to form the nucleus of the Philippine Diabetes Association (PDA). The group's aim was to unify all interests and entities in the Philippines concerned about diabetes mellitus into a single association.

The first sets of officers were: Dr. Wenceslao Vitug, President; Dr. Paolo

Campos, Vice-President; Dr. Carmen Salgado-Ora, Secretary; Dr. Aniceta Barcelon Guevara, Treasurer; and Dr. Antonio Ordonez, PRO. Elected to the Board of Directors were: Dr. Mariano Alimurung, Dr. Agustin Liboro, Dr. Conrado Pascual, Dr. Jesus Nolasco and Dr. Alfredo Navato.

The organization endeavors to foster and support research on the prevention and care of diabetes mellitus, including cooperation with relevant government agencies. The society also collects, interprets interchanges, and

disseminates recent developments and information on diabetes. Likewise, it also establishes affiliations with other diabetes institutions.

The activities during this initial period were a continuing series of seminars for physicians and people with diabetes.

THE BIG STEP FORWARD

From 1983 - 1994-for 11 years - PDA President, Dr. Augusto D. Litonjua injected vigor and dynamism to the

association. Under his able leadership, PDA projects were realized one after the other. PDA became a staunch advocate of education as a right of the people with diabetes and as a fundamental component in the treatment of diabetes mellitus, in addition to nutrition, exercise and medication. In line with this, education



clinics were established nationwide alongside the PDA Chapters which were first organized in 1987. The first PDA chapter was established in Davao City. Other PDA Chapters were added on annually, bringing the total number to thirty one.

PDA underwent several milestones during the period 1983-1994. The PDA was properly incorporated for the first time with the Securities and Exchange Commission (SEC). The PDA Lay Organization was set-up. The Association won recognition as a member of the prestigious Internal



Old PDA Logo

The 1st DIABETES WORKSHOP



of the
Philippine Diabetes Association

in cooperation
with the
PDA CHAPTERS
of
ALBAY, CAMARINES and SORSOGON

Nov. 30, Dec. 1, Dec. 2, 1990
at the
Tanchuling International Hotel
Legaspi City

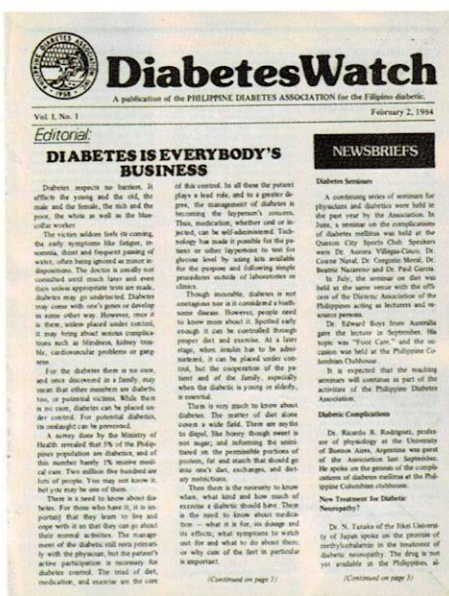
548 Shaw Boulevard, Mandaluyong City. The offices were inaugurated on June 15, 1992 with the attendance of past PDA presidents, and the heads of its pharmaceutical corporate members.

In July 1993, The Philippine Diabetes Association participated in the observance of "Diabetes Awareness Week" spearheaded by the Philippine Center for Diabetes Education Foundation, Inc (PCDEFI). This has become an annual celebration.

In 1995, the PDA once again co-hosted with PSEM the 8th AFES Congress at the PICC in Manila, Philippines.

In 1997, the PDA for the first time participated in booth exhibits in International Diabetes Federation (IDF) and International Diabetes Federation Western Pacific Regions (IDFWPR) Congresses; since then, the participation has continued every congress. The exhibit showcases PDA activities in the background of Philippine setting.

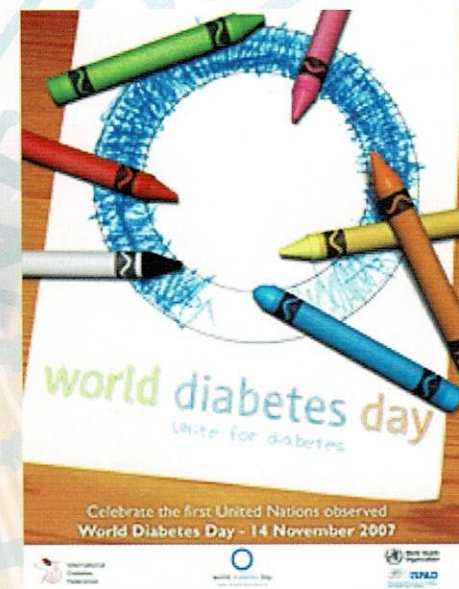
In 1998, the PDA joined forces with the Philippine Society of Hypertension (PSH) and Philippine Lipid Society (PLS) in putting up seed money to conduct Hypertension, Diabetes and Lipid Survey in the Philippines in cooperation with FNRI-DOH to update data on the



various places of the country beginning in 1990 starting in Legaspi City. The workshops were conceived to provide an intensive 3-day course to physician members of the PDA chapter. The physician members of the PDA board of directors served as faculty.

In June 1991, the Philippine Diabetes Association Board decided to change the PDA seal to dramatize its concern for the family, not only for people with diabetes. After a nationwide logo contest, the present seal portraying the family being cupped by two hands was chosen in December 1991. The logo was based on the winning entry of Dr. Gregorio del Moral.

Previously, the Philippine Diabetes Association had no permanent headquarters. Since 1992, it is proud to call home: Unit 25, Facilities Centre,



Diabetes Federation (IDF) as well as IDF Western Pacific Region. It came out with the semi-annual publication "DiabetesWatch," initially a newsletter, distributed free to physicians and patients.

The seed for an annual convention was planted in 1984, initially as a mini-convention which evolved into a 2 day-program.

In 1987, PDA and Philippine Society of Endocrinology (PSEM) co-hosted the 4th Congress of the Asean Federation of Endocrine Societies (AFES) held at the Manila Garden Hotel (now Dusit Hotel) from December 5-10.

PDA Workshops were conducted in

3 diseases for 1999. Other Researches completed for 1998 were the Diabetes Data Collection Program (DCDCP) and Diabcare Asia Study.

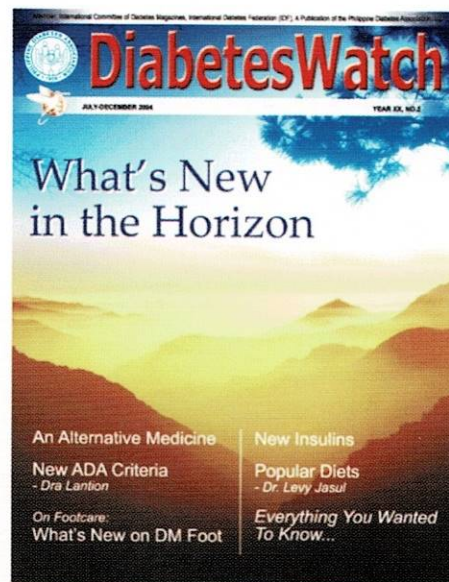
The Philippine Diabetes Association participated in the observance of "World Diabetes Day" on 14th November each year and this became an annual event.

POWER AND PRESTIGE

In 2001 - 2002, during the incumbency of Dr. Ruby T. Go, she initiated the PDA Mission, Vision and Values and formally launched the PDA website. PDA Chapters were activated through the Chapter Presidents meeting, The Chapter Presidents are encouraged to get involved in a poster making contest with the theme "Improve Diabetes Awareness" and "Increase PDA chapter membership." Research grants were also introduced to members and chapters.

In 2003 - 2004, Dr. Rosa Allyn Sy incorporated the Mission, Vision and Strategies of the PDA into the by-laws of the organization and conducted the Strategic planning workshop and organized the different councils of the association that aims to focus on the different needs of its members, namely Council on Exercise, Council on Nutrition, Council on Education, Council on Complications and Council on Research. She also produced the 2 VCDs (video compact disc), one on nutrition and one on exercise as part of information dissemination campaign.

To provide a responsible position for the general public on the controversial and widespread use of ampalaya by diabetics, the PDA was involved in the consensus statement of four organizations committed to diabetes care (Philippine Diabetes Association, Philippine Society of Endocrinology and Metabolism, Philippine Center for



Diabetes Education Foundation, Inc. and Institute for the Studies on Diabetes Foundation, Inc.) on the use of AMPALAYA in the management of diabetes mellitus after several

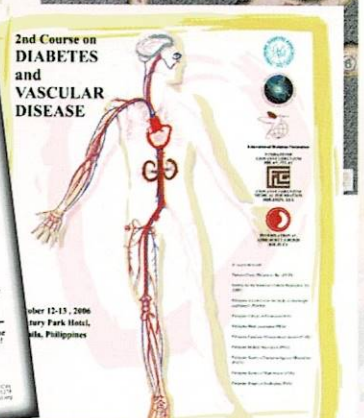
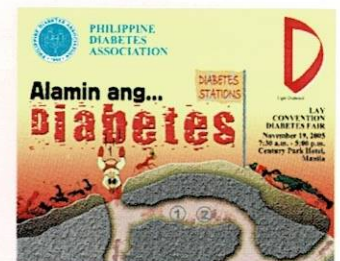
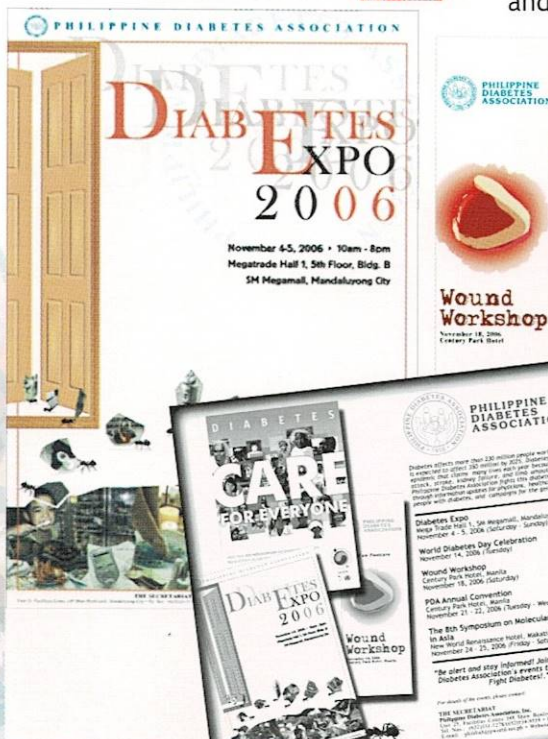
meetings with Secretary of Health and BFAD.

PDA continued the annual half day meeting with different PDA Chapter presidents started by Dr. Ruby Go. The regular meeting created bridges and links to the different regions of the country; giving them the forum to communicate their needs resulting in better communication from the national organization with its chapters. This relationship was further strengthened by the first team building activity in July 2003 in Bellevue Hotel in Alabang, Muntinlupa.

The 1st PDA chapter of the year was awarded to Bulacan Chapter and the 2nd PDA chapter of the year was awarded to Cebu chapter in recognition of its achievements in uplifting the association in their respective region.

The DiabetesWatch newsletter was also transformed to a full color magazine distributed biannually.

PDA actively participated in International activities of the International Diabetes Federation - Diabetes Village held in Paris, France and AFES booth in Singapore in 2003.



PDA's First Course on Diabetes and Vascular Disease was held October 15 -16, 2004 at Century Park Hotel, Manila.

In 2005 - 2006, Dr. Ma. Teresa Plata-Que continued the strategies of Philippine Diabetes Association thru Education, conducting the first Diabetes Strategies for Primary Care Physicians, 2nd Course on Diabetes and Vascular Disease, Diabetes Expo, Wound Workshop and Special Lay Forum.

An advocacy campaign about "Deadly ang Diabetes" and "Healthy Lifestyle

campaign were also pushed thru by tri media (TV commercial, posters, flyers, brochures). PDA also released the "Illustrated Food Choices" and "Foot" CDs. PDA continued to network with other medical societies local and international. PDA also initiated the UN led campaign Unite for Diabetes. In 2007 - 2008, Dr. Tommy S. Ty Willing continued to network with other medical societies, PDA chapters, International Diabetes Federation and in International Diabetes Federation Western Pacific Region.

He also continued the Mission of the association thru DiabetesWorkshops, 3rd and 4th Diabetes and Vascular Disease and lay forums. Spearheaded the first and second "Unite for Diabetes" congress supported by Philippine Society of Endocrinology and Metabolism, Institute for the Studies on Diabetes Foundation, Inc., and Philippine Center for Diabetes Education Foundation, Inc. Diabetes Awareness Week, National Health Expo, PASOO Wellness Summit.

PDA also supported the Ampalaya forum, May 2, 2007 in cooperation with Philippine Society of Endocrinology and Metabolism.

Designs on Diabetes National Art Contest was also launched last November 9, 2007 followed by press conference for "Gimik Diabetes" was launched in celebration of World Diabetes Day and lay annual convention.

He proposed the need to revisit and craft the Philippine Diabetes Association Mission, Vision and Values.

To date, the complete list of the Philippine Diabetes Association presidents is a display of distinguished names in Philippine Medicine:

WENCESLAO VITUG, MD
1958 - 1960

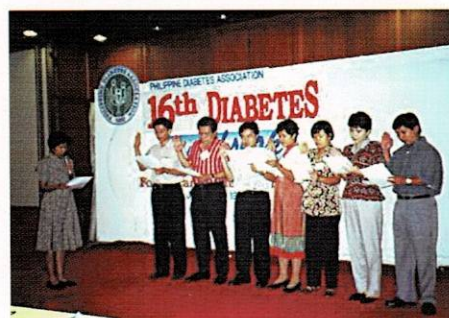
BASILIO VALDEZ, MD
1961 - 1965

AGUSTIN LIBORO, MD
1967 - 1969

PAULO C. CAMPOS, MD
1969 - 1970

CARMEN SALGADO-ORA, MD
1970 - 1971

GONZALO F. AUSTRIA, MD
1971 - 1972





Revisiting of PDA Mission, Vision and Values held last August 6, 2008 at Discovery Suite Savannah room: Standing from left are Dr. Gabriel V. Jasul Jr., Ms. Marippee Genato, Dr. Susan Yu-Gan, Dr. Elizabeth Paz-Pacheco, Ms. Sanirose S. Orbeta, Dr. Sioksoan Chan-Cua, Ms. Imelda Q. Cardino, Mr. Ammiato Bacus: Seated from left are Dr. Rosa Allyn Sy, Dr. Tommy S. Ty Willing and Dr. Editha Arceo-Dalisay. Not included in the picture: Dr. Ma. Teresa Plata-Que

SERGIO O. RUSTIA, MD
1973 - 1974

AURORA VILLEGAS-CINCO, MD
1975 - 1976

HERMINIO J. GERMAR, MD
1976 - 1977

LIM UY CHING, MD
1977 - 1978

NESTOR M. SANTIAGO, MD
1978 - 1979

VIRGILIO L. GONZALES, MD
1979 - 1980

LELAND S. VILLADOLID, MD
1980 - 1981

FLORA M. PASCASIO, MD
1981 - 1982

AUGUSTO D. LITONJUA, MD
1983 - 1994

MARY ANNE LIM-ABRAHAN, MD
1995 - 1996

LINA LANTION-ANG, MD
1997 - 2000

RUBY T. GO, MD
2001 - 2002

ROSA ALLYN G. SY, MD
2003 - 2004

MA. TERESA PLATA-QUE, MD
2005 - 2006

TOMMY S. TY WILLING, MD
2007 - present

Gleaning from its meritorious past, the Philippine Diabetes Association will remain a staunch guardian of the people with diabetes and his family. Amid the fast-changing lifestyles of Filipinos, the society can expect even bigger challenges as they continue the battle against this disease. **D**



GLIPIZIDE
MINIDIAB[®] OD
5mg / 10mg controlled release tablet

**SUSTAINED GLUCOSE
CONTROL WITHOUT
WEIGHT GAIN**



Dapat Sulit.



**STAY AWAY FROM THE
DIABETES DANGER ZONE.**

**With the *ONE TOUCH[®] Ultra[®]*
Blood Glucose Meter**

Even if you feel fine, you may fall into the diabetes danger zone. That's because blood glucose level changes throughout the day, depending on diet, exercise and medications. To avoid this, monitoring is key. With *OneTouch[®] Ultra[®]* blood glucose monitor, you can monitor your blood glucose numbers anytime, anywhere. *OneTouch[®] Ultra[®]* is the #1 meter recommended by Diabetes Specialists in the U.S.*

OneTouch[®] Ultra[®] gives you:

- Peace of mind with a proven 99.2% accuracy on your glucose tests*
- Less Pain
- Less Blood
- Results in 5 seconds
- Forearm testing (apart from fingertips)
- Dedicated Customer Service Support



20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 210



Johnson & Johnson
MEDICAL PHILIPPINES

ONE TOUCH[®]
changes everything.

*Reference: Physician Education Training Study, February 2003. Based on a study to the self-monitoring blood glucose (SMBG) industry involving 1540 patients who contributed 9,300 samples over 27 months.

Don't let diabetes take over.

With a durable foundation,
you can now take control of your life and your future.

PIOGLITAZONE HCl

PIOZONE[™]
15 mg and 30 mg Tablet

**Take Control with a
Durable Foundation**

- Durable glycemic control, alone or in combination
- Comparable HbA_{1c} lowering vs. Rosiglitazone while providing superior benefits against diabetic dyslipidemia
- Bioequivalent to the innovator brand
- 65% savings on total therapy cost



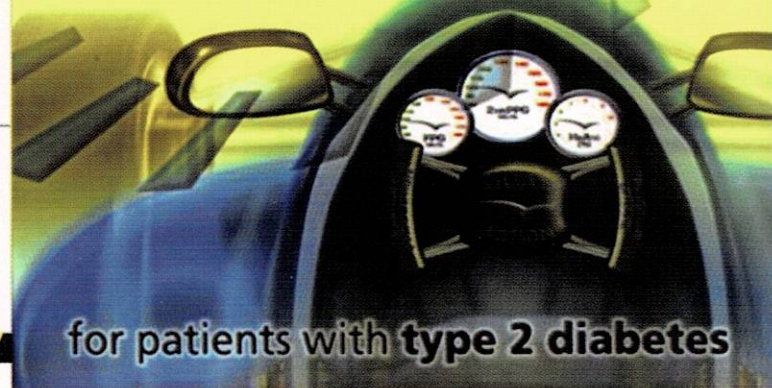
LRI World-class health care for Filipinos
A Division of UNILAB

FULL PRESCRIBING INFORMATION IS AVAILABLE UPON REQUEST.
2nd floor, Bonaventure Plaza, Ortigas Ave., Greenhills, San Juan, Metro Manila, Philippines 1502 • Tel. Nos.: 7244006 to 09 • Fax: 723-9604
References: Data on file. **PIOZONE[™]** is approved for sale by BFAD as prescription drug, and should be bought only with a doctor's prescription.

ONE TABLET, ONCE A DAY

Glimepiride
Solosa

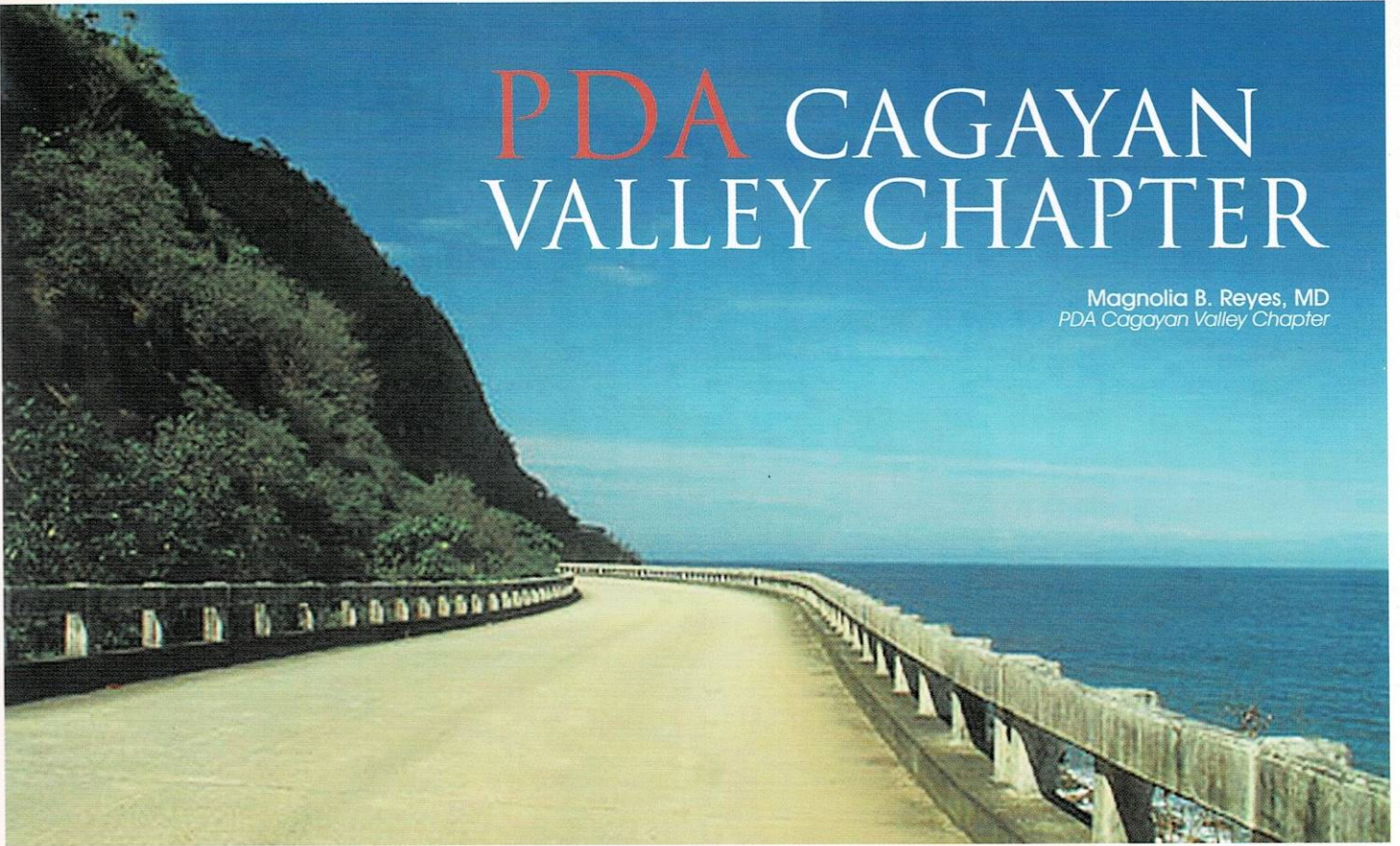
**COMPLETE CONTROL
RIGHT
FROM THE START**



for patients with **type 2 diabetes**

PDA CAGAYAN VALLEY CHAPTER

Magnolia B. Reyes, MD
PDA Cagayan Valley Chapter



May 9, 2008, Friday, was a much awaited day for the Cagayan Diabetic Association Chapter. The 36th diabetic workshop was going to be held at Roma Hotel and the faculty will be all coming from Manila. The third floor function rooms were bustling with activity as early as 7 am. The participating pharmaceutical companies had their displays up and giveaways ready. The PDA staff were arranging the

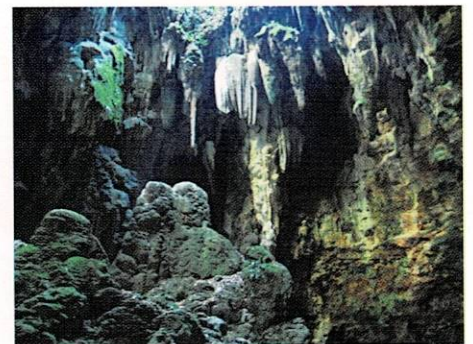
workshop kits. The faculty arrived at 7 pm the night before, travelling 12 hrs, passing through Bulacan, Nueva Ecija, Nueva Vizcaya, Isabela provinces and after 540 km from Manila arrived safely on a public transport bus!

Even though she was dead tired, but managing to still look fresh, beautiful and energetic, Dr. Teresa Plata-Que, was insistent that we begin the sessions at 8 am even though we had only 18 participants. Eventually the audience ballooned to 75 coming from the different provinces of Cagayan, Isabela Nueva Vizcaya and Kalinga. Dr. Leorino Sobrepeña started the workshop by lecturing on What is Diabetes and its classification. The other faculty included Drs. Gabriel Jasul, Sioksoan Chan-Chua and nutritionist, Ms Imelda Cardozo. The participants were enthusiastic, listened, learned, asked questions. Alas, like any other good thing, the sessions have to close at 5 pm since the whole staff had to leave at 7pm by bus for Manila.

Surely, if Mohammed cannot go to the mountain, the mountain will go to Mohammed. We are very grateful that the PDA came to us even for a very short

while, giving us a glimpse of the panoramic view on updated treatments for Diabetes Mellitus. We are looking forward for their return to give a more detailed concept on each topic.

We would like to thank also the PDA for giving us seed money for our activities.



To the participating pharmaceutical companies especially the coordinating company Servier, who helped us a lot to make this activity a reality, we send our sincerest gratitude.

Next time you come please stay longer, so we can show you the beauty of our beloved Cagayan. **D**



Better glucose and hunger control for diabetics



TAKE CONTROL. TAKE GLUCERNA.

✓ With Low Glycemic Index!



Diabetics need to maintain their blood glucose at a normal and healthy level to help prevent complications arising from diabetes. Medication, proper diet, and exercise play a major role in lowering blood glucose levels. Additionally, taking a nutritional supplement that has a low glycemic index will likewise help avoid sudden fluctuations.

GLUCERNA SR is a complete and balanced nutrition ideally formulated for diabetics. A great tasting low glycemic and low-

calorie oral meal supplement or snack clinically proven to provide better glucose control. Take control. Take Glucerna.

- **Unique Slow-Release (SR)** carbohydrate blend with a low glycemic index designed for slow absorption by the body to minimize after-meal blood glucose response and provide a sustained release of energy
- **High monounsaturated fatty acids (MUFA)** to help lower blood cholesterol and promote a healthier heart
- Enriched with **vitamins and minerals** essential to people with diabetes
- **Nutrient-dense and low-calorie** for better weight management
- **Tummy-friendly formula** with fiber. Gluten and lactose-free.

GLUCERNA SR - a complete and balanced formula for diabetics who want to be in control.

Ask your doctor about diabetes management and **GLUCERNA**. Call the **DIABETES HOTLINE** and get free nutrition counseling 689-0444 • Email: hcs.ph@abbott.com

Available in all leading supermarkets and drugstores nationwide.

Abbott
A Promise for Life

Overcoming barriers to use of handheld computers in medicine

Iris Thiele Isip-Tan, MD
Philippine General Hospital

Do you own a Personal Digital Assistant (PDA)? Do you perhaps use a smartphone - a phone with PDA capabilities? If not, what are you waiting for? I have been using a PDA since 1997 when the Palm Pilot Pro was just introduced. Back then, it had a monochromatic display, limited memory and the device ran on AAA batteries. A decade later, I'm still hooked and am now on my 4th handheld device, a Palm T/X with color display and wireless capability.

I am just one of the many physicians who find handheld computer devices useful in their clinical practice. US-based surveys¹ have shown increasing physician use of handheld devices, from 26% owning one in 2001 (Harris poll) to 50% reporting use during a typical work week (Forrester survey) in 2005. The same trend was seen in Canada² where PDA use by physicians increased by 73% from 2001 to 2003.

A focus group discussion³ looking at US physicians' experiences with handheld computers in clinical practice identified three major barriers to PDA use: personal issues, the device itself and potential changes to practice.

Personal issues. Eyesight was cited as a physical constraint to using a handheld device. This probably explains why users of handheld computers are typically younger. In a survey of internist-members of the American College of Physicians⁴, 60% of PDA users were below 40 years of age. A similar survey done in Canada² showed that 53% of physicians using these portable devices were less than 35 years old. In my experience though giving lectures on maximizing use of PDAs, I always tell my audience that if you can text, then you can use a PDA. After all, most cellular phones have even smaller screens than a typical PDA. However while texting demands manual dexterity to use a keypad, entering text using a stylus on a PDA's touch screen may present difficulties to older physicians.

Adults over 55 years old are significantly slower and less accurate in entering text on a touch screen, even after additional practice⁵. For the touch screen-challenged I would recommend smartphones that have keypads like the Treo series, to get around this constraint.

Another personal issue is perceptual constraints. Physicians not used to computers may not expect to receive enough benefit from use of a PDA to justify the time spent to figure it all out. Again using the cell phone analogy, a basic cell phone contains much of what you would find in a typical handheld device: Contacts, Calendar, To Do List, Notes, Calculator and Clock. These are just called something else: Address Book, Date Book, Tasks, Memo Pad etc. Hence, anyone comfortable with using a cell phone should not have difficulty with a basic PDA.

Device itself. The very features that make a PDA portable and therefore suited for a physician's active lifestyle - the small screen, limited memory and battery life, may actually be the very same features that turn off potential users who want a more powerful device. While the PDA is essentially a "palmtop" computer, it is not a laptop and hence cannot be expected to have the same features. However if the goal is to essentially be "better than paper", handheld devices have more than enough functionality. For example, it is just as easy to scribble a quick note to yourself on a PDA as on a PostIt note but you're less likely to lose this as compared to a small piece of paper. Retrieving the note later can be faster and it can also be linked to related tasks, addresses and appointments. Furthermore it is easier to maintain a To Do list on a PDA, than on a piece of paper which can get messy and illegible as tasks are added, amended or crossed out. In contrast, ticking off a task on your PDA hides it leaving a tidier list. It is also possible to rank the tasks according to order of importance and to set up alarms to remind you of

items that need to be done at specified times.

Another barrier to use is the possibility of loss, breakage and reliability. PDAs are just like cell phones in that these can get lost or stolen, dropped and broken. But these concerns don't stop many from owning a high-end cell phone. The care that one takes with a cell phone applies just as well to PDAs, even as some entry-level PDAs may actually be cheaper than cell phones.

Potential changes to practice. There is a fear of becoming over-reliant on the handheld device as a "peripheral brain" resulting in an inability to function without it. This I believe is a misconception closely tied to the belief that doctors should be able to keep up-to-date medical information in their brains at all times. Such is unreasonable at the speed with which medical progress is rendering what has been learned a few years back in residency or fellowship training rapidly obsolete. My PDA is replete with medical references and calculators as well as drug prescription information that I can access during rounds. I do not believe I am over-reliant on the device. Without a PDA, one can just as easily check for drug interactions using the good old MIMS but the handheld device saves me time having to look for a copy of MIMS at the nurses' station.

There is also a concern that patients might look negatively upon doctors who use handheld computers - that such physicians may be perceived as forgetful or stupid. However it is equally possible that patients will perceive physicians with PDAs as "high-tech", modern, up-to-date and hence, smart.

I strongly believe that these barriers to PDA use can easily be surmounted if one is convinced of the potential benefits that these devices can bring to your medical practice. Don't get left behind, get one now!



INFORMATICS

Navigating the Net: Managing Gestational Diabetes with the help of the National Institutes of Health (NIH) Website

Cecille dela Paz, MD
East Avenue Medical Center

Pregnancy is one of the most joyous moments in a woman's life. But amidst the joy and excitement, there are also moments of anxiety, when you wonder if you and the baby you are carrying will be healthy throughout the nine months of pregnancy. The fear is especially acute if one is diagnosed with a condition such as Gestational Diabetes or GDM. While your obstetrician and your diabetes doctor may be willing to answer all your questions regarding this disorder, it would also be useful to obtain additional information through resources like the internet.

The National Institutes of Health website is an ideal source of information on almost any conceivable health topic. It is the medical research agency of the US Department of Health and Human Services and has a host of resources for both the average person and the health professional. The website is rather intimidating at first, chock-full of articles about different conditions but follow this step-by-step guide to lead you directly to the topic at hand.

Accessing the Website

- Go to www.nih.gov
- Use your mouse to point to the HEALTH tab and a drop down menu appears
- Click on "A - Z Health Topics"
- Click on the letter "D"
- Click on "Diabetes and Pregnancy"
- The information on gestational diabetes that can be found under the under the Eunice Kennedy Shriver National Institute of Child Health and Human Development
 - o Am I at Risk for Gestational Diabetes?

- Contains a questionnaire so that you can know your risk level for developing GDM
- o Disorders of Pregnancy
 - Presents an overview of the different conditions that can complicate a pregnancy, including GDM
- o Gestational Diabetes
 - Gives an overview of the disorder, and provides answers to frequently asked questions on GDM
 - What is gestational diabetes?
 - How do I know if I have gestational Diabetes?
 - Will gestational diabetes affect the baby?
 - How is gestational diabetes treated?
 - What happens after the baby is born?
- o Managing Gestational Diabetes: A
 - Patient's Guide to a Healthy Pregnancy
 - Provides more information and answers more questions about GDM
 - Why didn't I have gestational diabetes before?

- Who can I go to for help with gestational diabetes?
- Will gestational diabetes affect my labor or delivery?
- Will I have diabetes after I have my baby?
- What should I do if I have gestational diabetes?
- What should I do after my baby is born?
- How can I tell if I'm likely to develop diabetes in the future?
- Will my child also have diabetes?
- Plan your next pregnancy

▪ Plus additional tools like sample menu, sample glucose monitoring sheet and sample food and activity record sheet.

If you're a pregnant woman with gestational diabetes or a diabetic who is now pregnant, check out this site at <http://www.nih.gov>

All the information from the website should supplement and complement what your doctors tell you in the clinic. By working together, you can all ensure a worry-free and successful pregnancy.



Etc, etc ...

Other web resources and references for pregnant women with diabetes

Cecilia A. Jimeno, M.D.
Philippine General Hospital

You are pregnant and you also just learned that you have gestational diabetes or diabetes in pregnancy. You have a lot of questions and fears, and your doctors do not always have a lot of time to talk to you. There are many resources in the web which can supplement the information that doctors, diabetes educators or dietitians give you. These websites are not meant to provide definitive information about diabetes management for individual patients but really to fill in the gap in information that patients require but which health professionals may not always be able to provide. With the glut of information available on the net plus the limited time that most people have to surf the web, one needs to get reliable information from trusted sites.

These are some web sites with best information about gestational diabetes from diabetes experts (endocrinologists, diabetologists, diabetes nurse, diabetes educators and dietitians)

- **www.ada.org/home** The ADA outlines the importance of treatment for Gestational Diabetes for both mother and child. Go to the list of topics on the menu list on the left side of the website, point your mouse to "All About Diabetes" then click on Gestational Diabetes

- **www.diabetes.ca** The Canadian Diabetes Association has an information page on Diabetes and Pregnancy. In their home page, look for the menu on the left; click on "Diabetes Facts" and open Gestational DM. Click also on "About Diabetes" and open the article on "Type 1 Diabetes and

Pregnancy" which was written by a first time mother with Type 1 DM.

- **www.joslin.org** The Joslin Pregnancy Clinic for information, advice and services. Go to the website and open the menu entry, "Learn about Diabetes". This will open to the various types of diabetes including Type 1 DM, Type 2 DM and Diabetes in Pregnancy.

- **www.mayoclinic.com** The Mayo clinic website offers comprehensive information about gestational diabetes including its definition, symptoms, risk factors, when to seek medical advice, prevention and treatment, and coping and support.

- o Click on the letter "G" on the Find it Fast Box, then click on gestational diabetes

There are other sites made by special interest groups, non-doctors or women who also have diabetes to have pregnant women with diabetes:

- **www.diabeticmommy.com**: An online magazine on diabetes and pregnancy, discussing fertility issues, gestational diabetes, parenting and women's issues. This site comes with a disclaimer that this is not a health care site and that the editor is not a health care professional. Provides a wide variety of information about diabetes in general, but the more interesting aspect of this site are the journal entries ("blogs") of Michelle K a mom who experienced pregnancy with diabetes for the first time

- **www.pregnancy.org** is another interesting "lay" site because it not only attempts to educate pregnant women in general about any and all aspects of pregnancy (preconception; what's a 3D ultrasound? early pregnancy

tests; birth and postpartum) but it also gives information about some problems during pregnancy like gestational diabetes. Aside from these there are also many interesting and useful tools for expecting parents like a baby name finder or a pregnancy calendar to predict the expected date of delivery.

- **www.diabetesnet.com/pregnancy** is a site that has a short section on gestational diabetes but gives a list of web sources to provide best information on GDM.

<http://diabetes.battlingforhealth.com> This site again provides information for all individuals with DM, but offers a short article on GDM plus helpful links to medical sites on GDM.

You are not alone! To learn from the experiences of other pregnant women with gestational diabetes or diabetes in pregnancy, look for blogs of pregnant women with diabetes. Or better yet, make your own blog and share your experiences (both the joys and the lows of being pregnant with diabetes) with other women. Go to google and type "how to make/write a blog". There are many sites that will help you make your own blog site for free. Go to one of these sites like www.blogger.com and voila ... in 3 simple steps you have a blog site! Hope to read your blog soon!



PDA ON THE MOVE

36th Diabetes Workshop

Hotel Roma, Tuguegarao
May 9, 2008

The 36th Diabetes Workshop was held at Hotel Roma, Tuguegarao last May 9, 2008. The event was well coordinated by Dr. Magnolia Reyes (President, PDA Cagayan Valley Chapter), Dr. Elizabeth Paz- Pacheco - PDA Secretary and PDA National Director - Ms. Maripée Genato.



Unite for Diabetes

Century Park Hotel Manila
July 17 - 18, 2008



Another successful activity held last July 17 -18, 2008 at Century Park Hotel, Manila is the 2nd Unite for Diabetes. Dr. Susan Yu-Gan and Dr. Rima Tan served as the Co-Chairs of the Scientific Committee.

During the 2 Day Event The Officers of the four Major Association (PDA, PSEM, ISDF and PCDEF) together with (PADE and PSPME) conducted a meeting to discuss issues in developing Clinical Practice Guidelines.

Diabetes Awareness Week - Bulacan

This activity held last July 25, 2008 at Hiyas Convention Center, Malolos Bulacan. Headed by Dr. Maria Josefa Yanga, President PDA Bulacan Chapter with a total of more than 300 attendees.



Diabetes Awareness Week

Glorietta, Makati City
July 20, 2008

Theme: UTOS NI LANGGAM: Mahal Mo I-Check Mo, Baka Diabetiko Na Ito"

- Different Diabetic Groups from Manila and nearby provinces grace this year's Diabetes Awareness Week held at Glorietta held last July 20, 2008 (Sunday). The day featured activities that included awarding of medals to diabetic people fighting their disease for years, cheering and dance competition of different diabetic groups. Ms. Chynna Ortaleza one of GMA Kapuso Stars wowed the crowd with her dancing moves.

**East Ave**

East Avenue Medical Center celebrated their DM Awareness Week, last July 28, to August 1, 2008. This was successfully led by Dr. Teresa Plata-Que, chief of the section of endocrinology. The affair was well attended by doctors other allied health personnel and people from neighboring hospitals and insitutions.

Dagupan

The activity was held at CSI Mall in Dagupan last July 27, 2008. The event was well prepared by the working committee. (Dr. Edith Bermudez, Dr. Jubila Balderas - de Guzman, Dr. Felipe Gozar Duque, Dr. Lalaine Duque, Dr. Marino Idica, Dr. Clezzel Monsanto, Dr. Rhodelia Ramos, Dr. Jovito Rivera, Dr. Isabelita Siapno, Dr. Lourdes Torio, Dr. Elmer Tumacder.

**Baguio**

There were more than 400 attendees during this activity. The event was well organized by Dr. Francis Pizarro (PDA Baguio Chapter president) and Dwight Black.



Yahoo for YACON! *Trivia and Nutrition information about the latest craze in diabetes diets*

Cecilia A. Jimeno, MD
Philippine General Hospital



Yacon - *Smallanthus sonchifolius* (Poepp. & Endl.) H. Robinson
Common Names: "leafcup", "yacón", "yacon strawberry" **Castilian/Spanish:** Peru, Bolivia, Argentina "yacón", "llacon", "llacjon", "llag'on", Colombia "arboloco"; Colombia, Venezuela "jiquima", "jiquimilla". **Aymara:** Peru, Bolivia "aricoma". **French:** "poire de terre"

The scientific name of this herb is a tongue twister: ***Smallanthus sonchifolius***.

Yacon is a perennial herb growing 1.5 to 3 m tall with dark green celery-like leaves. It belongs to the same family of sunflower, common daisy, dandelion, and lettuce. The plant produces both male and female daisy-like yellow to orange flowers that are pollinated by insects. Each plant forms a underground clump of 4 to 20 fleshy large tuberous roots with

each tuber weighing on average, about 500 g. The skin of the tuber when fresh is a tan to a light yellow in color but quickly turns dark brown to dark purple when exposed to air. Yacon typically grows in the warm, temperate valleys of the Andes but it can also be found at altitudes up to 3200 meters. Though a native to the lower Andes regions it can also be found in Peru, Ecuador, Bolivia, and Colombia. It is now widely cultivated for its edible roots throughout South America and has been

exported into Japan, Taiwan, New Zealand, the Czech Republic, the United States and now even in the Philippines as a novel edible root crop.

This plant was introduced in the Philippines in the late 90s and the first growers were members of a cooperative in Claveria, Misamis Oriental. Today, yacon is widely cultivated in Nueva Vizcaya, Cordillera, and other highlands. According to the Philippine Council for Industry and

“The term yacón and its derivatives come from Quechuan (Peruvian) words; yacu and unu are words that mean water, whereas yakku is an adjective that means watery or insipid, alluding to its tuberous roots, which are watery or juicy immediately after harvest.”

Energy Research and Development (PCIERD) yacon was introduced in the Cordilleras as a way for the Philippine National to completely eradicate marijuana plantations in the area and at the same time, provide communities with alternative planting materials. Yacon has also been named “apple of the earth”, because of the fact that its root is eaten raw and possesses a sweet tasting and crunchy texture. The term *yacón* and its derivatives come from Quechuan (Peruvian) words; *yacu* and *unu* are words that mean water, whereas *yakku* is an adjective that means watery or insipid, alluding to its tuberous roots, which are watery or juicy immediately after harvest. The terms *jicama*, *jíquima*, *jiquimilla*, *jikima* and derivatives are the result of the similarity between its roots and those from *Pachyrrhizus* sp., “jicama”. Closer to home, the tuber looks like a variety of kamote or sweet potato but its flesh is sweet and crunchy just like “singkamas”.

The entire plant is edible from the tuberous roots, aboveground stems, leaves, and rhizomes, but the roots and the leaves are the most commonly used.

TRIBAL AND HERBAL MEDICINE USES

In early evolutionary periods, Andean farmers had already recognized the value of yacon as a cultivated food crop. Yacon has been discovered in burial grounds from centuries before the Incas. The first written record of yacon was in 1615 when Felipe Guaman Poma de Ayala included it in a list of 55 native crops cultivated by the Andeans.

In South American herbal medicine systems the tubers are taken raw to

induce urination for kidney and bladder problems while they decoct the leaves for bladder, kidney and liver diseases in Bolivia. In Peru, the leaves are prepared into a warm poultice and used externally for myalgia (muscle pain) and rheumatism. In Brazil the



leaves of the plant are brewed into a tea as a natural remedy for diabetes. However, these are of course anecdotal reports or traditional use in the community; there are still very little data on these specific uses. Probably, the most well studied among the parts of the plant are the leaves which are dried and used as a tea to help decrease the blood sugar in diabetes. There is a small study on this done in Brazil, but as of yet there is not much data yet on how effective it is, what dose should be used or how frequently the tea should be taken, and even safety concerns. Thus, like most herbal agents or supplements it is of limited use as treatment of specific (chronic)

diseases like diabetes. Perhaps, their greatest use is to improve or promote health through proper nutrition because like many vegetables, Yacon is very nutritious.

What is the nutrient composition of Yacon?

CHEMICAL ANALYSIS AND NUTRIENT COMPOSITION OF THE YACON TUBER

The analysis of fresh tubers of *Smallanthus sonchifolius* resulted as follows:

Humidity or moisture: 69%-83%
Carbohydrates (mainly inulin-type compounds) 20%
Protein 0.4%-2.2%

The analysis of the dry tubers, according to the same study, resulted as follows:

Carbohydrates (mainly inulin-type compounds) ± 65%
Protein 6%-7%
Ash 4%-7%
Fiber 4%-6%
Fat 0.4%-1.3%

Yacon tuber also contains traces of phosphorous (22%), glucide (11.1%), protein (0.8%), fiber (0.6%), lipids (0.6%), and cellulose (0.5%). Other essential elements found in yacon are iron, calcium, sodium, potassium, carotene, magnesium, and Vitamins A, B1, B2, and C.

Other tubers like the sweet potato store carbohydrates primarily in the form of starch, which are calorie dense. The tubers of Yacon on the other hand, store carbohydrates in the form of inulin-type sugars. These are also called fructose polymers or oligofructans or fructooligosaccharides (FOS) that the

human body can not metabolize due to lack of the appropriate enzymes. This means that the sugars in Yacon can pass throughout the human digestive tract almost unaltered, until they are evacuated with feces. Hence, the roots of *Smallanthus sonchifolius* provide scarce calories (4-10Kj/g). One can eat yacon as a snack or substitute to rice, and feel full without the guilt. The yacon root or tuber is a rich source of these FOS or inulin-type sugars. These compounds help give the tuber its sweet flavor. For this reason, yacon shows much promise as a food for diabetics and as a base for a low calorie sweeteners.

These oligofructans have been recently classified as "probiotics." Since they are not digested in the human

gastrointestinal tract they are transported to the colon where they are fermented by a selected species of gut micro-flora (especially *Bifidobacterium* and *Lactobacillus*) and help to balance gut flora and aid digestion. One laboratory study suggests that the probiotic effect of yacon tuber extracts during the fermentation process enhanced the natural production of beta-glucans which act as non-specific immunostimulants, for improving one's general resistance to infections.

CHEMICAL ANALYSIS AND NUTRIENT COMPOSITION OF THE YACON TUBER

Leaves are said to be eaten as vegetable, when cooked. One Brazilian

doctor [Kakihara et al. (1996)] reported the use of a 5% dry leaf infusion, as a kind of tea, drunk as antidiabetic; it is, as a reducer of glucose blood levels or hypoglycemic. Moreover, the use of leaves as fodder for cattle has been suggested because of its high content of protein. However, and similarly to what occurs with the stems, there is no experimental information concerning this fact. However, certain chemicals in the leaves called terpenoids may limit its palatability (meaning its not as tasty as perhaps lettuce or kangkong leaves).

According to the National Research Council of the United States (1989), the chemical composition of the dry leaves is as follows

Protein 11%-17%



Picarones with Chancaca honey

"Consumers should be aware however, yacon root is not going to help diabetics lower or maintain blood sugar levels as some are trying to market it for (and the tuber actually does contain glucose and fructose)."



Yacon root

Fat 2%-7%

Nitrogen-free extract 38%-41%

Other chemicals in the tubers and leaves.

Both the tuber and the leaves of the plant contain chlorogenic, ferulic and caffeic acids which are known to provide an antioxidant effect. Several sesquiterpene lactones can be found in the leaves of the yacon plants which have evidenced antibacterial and antifungal actions in laboratory tests.

SUGGESTED USES

While yacon root is currently being marketed to diabetics and dieters, no blood sugar lowering effects have been published in humans or animals for the tubers (only the leaves). Because it contains a type of sugar that is not metabolized (as well as being much lower in calories), it is certainly an

appropriate sweetening substitute over regular sugar for diabetics and dieters. Consumers should be aware however, yacon root is not going to help diabetics lower or maintain blood sugar levels as some are trying to market it for (and the tuber actually does contain glucose and fructose).

In local Andean markets today, yacon root is considered a fruit and sold with other fruits like pineapple and apples, rather than in the vegetable or potato section. The crispy sweet flavor of the tubers is enhanced with drying in sunlight until the skin is slightly wrinkled. They are then peeled and eaten as is, or chopped into salads, and steamed or fried. The tubers are also juiced and then concentrated into syrups and sweeteners (much like dark corn syrup) or further dried and concentrated to produce solid dark-brown sweet blocks called *chancaca*. In the U.S. several relatively new yacon root syrups are now available in health food stores and natural products markets as a low-calorie alternative

to corn syrup or molasses. Capsules of the tuber are also being marketed as antidiabetic agents or antibiotics but of course, the yacon is not recommended for these indications. The leaves have demonstrated the ability to lower blood sugar levels. But diabetics should check with their doctor before using the leaves, and monitor their blood sugar levels accordingly as medications may need adjustment.

So, although there are animal studies and even limited human trials on the use of Yacon as an antibacterial, antidiabetic, antifungal, antioxidant, hepatoprotective (liver protector), hepatotonic (liver tonic), and as an immunostimulant, these are not yet confirmed by well conducted human researches. Yacon should not be used for these indications but rather to improve general nutrition due to its high protein content (leaves) or due to its "good" carbohydrates that aid digestion. So let's say yahoo to Yacon! 



Chancaca sweet blocks



Yacon Sweet Syrup

Certain things need special care.



BD Micro-Fine™ Plus Pen Needles
now incorporate thin wall technology



- Compatible with all leading insulin pens
- Optimised point geometry to reduce pain
- Proprietary micro-bonded lubricant for improved injection comfort
- Extremely fine 31G diameter
- Increased inner bore diameter for faster and easier injections
- Practical screw thread for secure fit on all leading insulin pens

MEDISAFE™ MINI
Blood Glucose Monitoring System

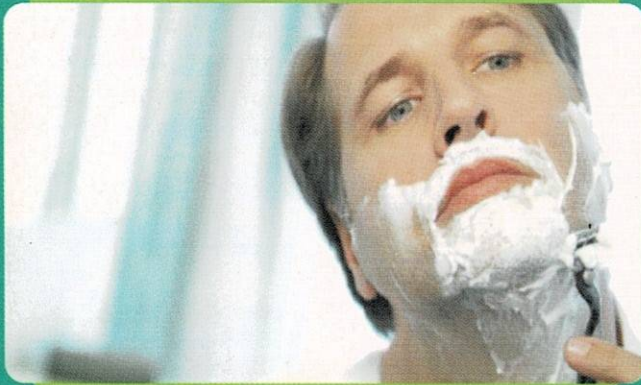
TERUMO®



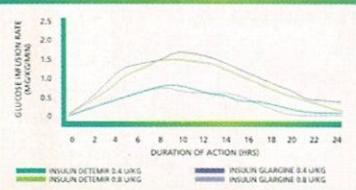
MEDISAFE™ MINI
Blood Glucose Monitoring System

TERUMO®

Something I do ONCE DAILY



The pharmacodynamic profile of Levemir™ demonstrates up to 24-hour action for a ONCE-DAILY dose¹



Equivalent shape and flatness to insulinalgargine in clinically-relevant doses¹

- ONCE-DAILY Levemir™ gives people with type 2 diabetes up to 24-hour duration of action¹
- 82% of people were observed using ONCE-DAILY Levemir™ + orals²

Reference:
1. Kohn D et al. All-in-one basal insulin analogues (insulin detemir and NPH): comparable time-action profiles but less variability than insulin glargine in type 2 diabetes. Diabetes, Obesity and Metabolism 5, 2002, 236-239.
2. Gombart A et al. Safety and efficacy of insulin detemir in clinical practice: 14-week follow-up data from type 1 and type 2 diabetes patients in the PROactive European cohort. 9th Journal of Clinical Practice 2007.



Insulin Detemir

Levemir™ FlexPen™
ONCE-DAILY modern basal insulin



Full prescribing information is available upon request.
Novo Nordisk Pharmaceuticals (Philippines), Inc.
The World's Leading Diabetes Care Company
Unit 2006 One San Miguel Avenue Building
San Miguel Avenue, Ortigas Center, Pasig City 1405
Tel. No.: (632) 667-3647 Fax No.: (632) 667-3642
Website: www.novonordisk.com



ACCU-CHEK® Active

A well-informed patient and a supportive loved one spells the formula for a successful partnership that can fight diabetes. A good understanding between a responsive patient and a devoted physician also helps to assure care and remedy.

Regular monitoring done consistently and in a loving way becomes a pleasant experience for the patient. Accu-Chek provides the reliability that binds that relationship.

For more information, discuss with your diabetologist or you can reach us through:
Assist CareLine: 893-8000
E-mail: Diagnostics.Philippines@Roche.com



Available at **mercury drug**

watsons

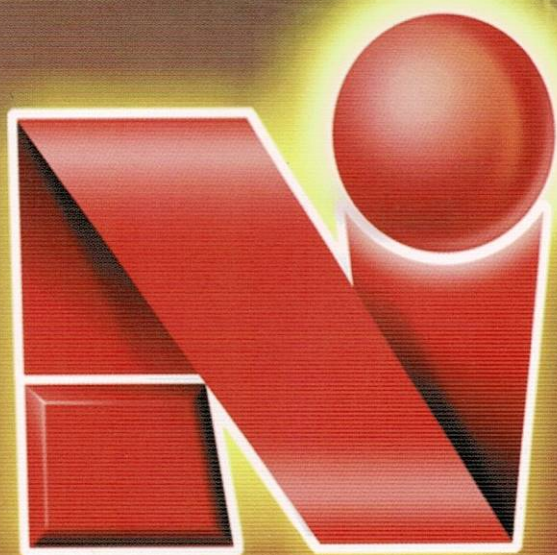
and other leading drugstores

**ACCURATE, EASY-TO-USE,
WITH MEMORY &
AVERAGING FUNCTIONS**

ACCU-CHEK®
Live life. The way you want.

4 million

Filipinos have diabetes mellitus.*



**A powerful
commitment
to their future**

POWERFUL & PRECISE GLYCEMIC CONTROL

Glimepiride



Cardio-Metabolic Partner for Life

NORIZEC
1mg 2mg 3mg tablet



GLICLAZIDE DIAMICRON® MR

**2 to 4 tablets*
once daily**

***in most patients**

EFFECTIVE

Always once daily¹

SELECTIVE

**Avoids cardiovascular
interactions²**

PROTECTIVE

**Inhibits key steps in
atheroma production³**

**Increases survival rate of
pancreatic beta-cells⁴**

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

1. Drouin P. and the Diamicon MR Study Group. *J Diabetes Complications*. 2000; 14 : 185-191
2. Gribble FM, Ashcroft. *Diabetologia* 1999; 42 : 845-848.
3. O'Brien R.J. *Diabetes Complications*. 2000; 14 : 201-206
4. Kimoto K, Susuki K, Kizaki T, et al. *Biochem Biophys Res Com*, 2003; 33 : 112-119

Full prescribing information available upon request.



#2 Orion corner Mercedes Streets, Bel-Air Village, Makati City Philippines 1209 • Tel. Nos. 897-8990 to 97, Fax No. 897-9027

