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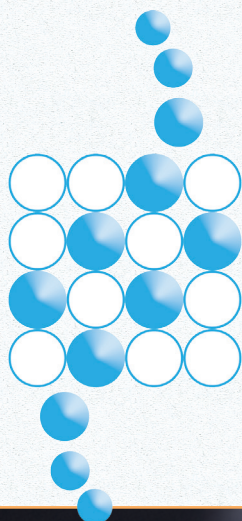
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## FNRI-DOST develops DOST PINOY, a nutrition intervention strategy

One of the Millennium Development Goals (MDG) is to end poverty and hunger by 2015. Poverty and hunger are interrelated since the root cause of malnutrition problem in developing countries is poverty. In the Philippines, malnutrition is most prevalent among infants and children through age four. Infancy and early childhood years are critical periods wherein children need adequate nutrition to reach their full potential. According to the National Nutrition Survey (NNS), malnutrition rates increased between 6 and 24 months old children. This is a vulnerable period when breastfeeding is no longer sufficient to meet the nutritional requirements of the child, hence, complementary feeding. In response, the Department of Science and Technology (DOST), through Food and Nutrition Research Institute (FNRI), devised nutrition intervention strategies aimed to address malnutrition.



FNRI conducted a study titled Development of Model for DOST PINOY (Package for the Improvement of Nutrition of Young Children): A Nutrition Intervention Strategy. The study aimed to reduce the prevalence of underweight among 6 to 35 months old children after nutrition intervention and to increase the participation of mothers/caregivers in existing nutrition programs in the area.

The intervention includes complementary feeding for the underweight children and nutrition education for mothers/caregivers. In the study, 1,006 underweight children were divided into intervention and non-intervention groups. The intervention group was fed for 120 days with complementary food blends developed by FNRI-DOST such as rice-mongo blend, rice-mongo-sesame blend and rice-mongo curls and their mothers attended nutrition education classes. The control group, on the other hand, was not fed with any complementary food blends.

Results of the study showed that there is a significant decrease in the prevalence of underweight children in comparison with the non-intervention group. After initial resistance, the complementary food

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## FNRI complementary snack foods ready for adoption

Nutrition is valued as one of the most basic human right, necessary for survival and growth and development of children. Despite this fact, malnutrition still affects millions of lives around the world.

*"In the Philippines, two in every 10 Filipino children aged 5 and below are underweight,"* according to the Food and Nutrition Research Institute (FNRI).

Results of the 7th National Nutrition Survey showed that eight in every 10 Filipino children aged 6 months to 5 years old were not meeting the recommended energy intake while five of 10 children fall short of their protein requirement.

With improving the nutritional status of children in mind, FNRI conducted the project, *Production and Technology Transfer of FNRI-developed complementary/*



*snack foods.* The project aimed to produce nutritious complementary foods for children and share the technology to all regions in the country, particularly in areas where malnutrition is high.

The team of FNRI researchers, led by Ms. Joyce Tobias, produced complementary foods such as rice-mongo instant blend, rice-mongo curls, and rice-mongo-sesame ready to cook blend. The technology transfer process started with the conduct of technology forum, a whole day of information sharing activity on the FNRI-DOST SulongPinoy Program and NegosyongPinoy: FNRI-Developed Complementary snack foods. Prospective entrepreneurs signified their intention of adopting the technologies by signing a memorandum of agreement.

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## A friendly diet for diabetics

*"Taking steps to prevent and control diabetes doesn't mean living in restriction. Making wise food choices and planning ahead of time allows diabetics to enjoy their favorite food and take pleasure from meals without feeling deprived,"* emphasized Ms. Sanirose Orbeta, Consulting Clinical and Sports Nutritionist in her presentation titled, *"Diabetic Diet: How to Improve Compliance?"* during the Lay Forum on Hypertension last February 10, 2013 at the Crowne Plaza Galleria Manila.

A diabetic's diet, also recommended to most of the population, is composed of nutrients-rich, low in fat, moderate in calorie foods. This eating plan does not suggest total elimination of carbohydrates in meal but only requires vigilance on the amount of carbohydrates intake per meal per day. As Ms. Orbeta explained, *"The key for a diabetic patient's diet is consistent carbohydrate counting from meal to meal and from day to day as the amount of carbohydrate in meals has the greatest impact on blood sugar levels."* Ms. Orbeta recommended, *"Eat regular meal schedule in moderate and consistent portion sizes to spread carbohydrates intake evenly throughout the day. With this strategy, you can maintain energy levels without causing large rises in blood glucose levels."*

People with diabetes are not prohibited for a once in a while sweet treats. According to Ms. Orbeta, sufferers from diabetes may include sweets occasionally as long as a healthy diet is maintained and sweets are not eaten as a stand-alone snack. She also advised to remove the other carb-containing foods when adding sweets in a diet.

Though diabetes is a blood sugar-related disease, diabetics are warned on their sodium intake. As reported by the American Diabetes Association, people with diabetes

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## Daily consumption of camote can lower bad cholesterol, says expert

*"Camote or sweet potato is a very good source of soluble fiber that lowers bad cholesterol. It also prevents tumor formation, colon, and chronic diseases,"* revealed Ms. Felicidad Velandria, registered Nutritionist-Dietitian and a former Supervising Science Research Specialist during the Philippine Lipid & Atherosclerosis Society (PLAS) and Philippine Society of Hypertension's (PSH) Lay Forum at the Crowne Plaza Galleria Manila last February 10, 2013.

Ms. Velandria shared the results of a recent study by the Food and Nutrition Research Institute (FNRI) which showed that root crops, camote in particular, are excellent sources of dietary fiber. She said that dietary fiber can lower low density lipoprotein or LDL cholesterol (bad cholesterol) while increasing high density lipoprotein or HDL cholesterol (good cholesterol).

*"Eating 50 grams of available carbohydrates from boiled camote for three months will increase your good cholesterol,"* said Ms. Velandria.

According to FNRI's research, camote and other root crops can prevent the re-absorption of bile acids in the liver. Bile acids are converted to cholesterol in the liver and goes to the arteries. Based on their study, the dietary fiber content of root crops has 4.6 to 13.5 grams per 100 grams. FNRI explained that root crops are not digested in the small intestine, but fermented in the colon by friendly bacteria. When it is fermented, these can produce short chain fatty acids (SCFA) which can help prevent cholesterol synthesis.

To bring more public awareness on healthy dieting, Ms. Velandria reiterated, *"Consume an overall diet that is high in dietary fiber such as camote and other root crops, fruits, vegetables grains and legumes. Also, make it a habit that when eating meat, remove the fatty part and choose the lean meat. These are the things that can*

*lower your bad cholesterol.*

(Rachel Ann Doreen D. Nadal)



## Having problems with dyslipidemia, change your lifestyle

Fat is important, it is an essential nutrient. Just like carbohydrates and proteins, it gives calories or heat to our bodies in order for us to move, think or work. However, having an abnormal amount of lipids or fats in our blood profile may develop into Dyslipidemia.

According to Ms. Felicidad Velandria, registered Nutritionist-Dietitian and a former Supervising Science Research Specialist of the Food and Nutrition Research Institute (FNRI), *"The energy or calorie of fat is higher or more concentrated that is why we should limit its consumption. Fats have its function. If you exceed or lack consumption of fat, its function will not work. Without fat, our body will not absorb Vitamins A, D, E and K or the fat-soluble vitamins."*

Dyslipidemia is a state when bad cholesterol is very high or the good cholesterol is very low. It has a risk of developing atherosclerosis, a condition where the arteries become narrowed and hardened. It can be due to genetic disposition, having diabetes, obesity, sedentary or inactive lifestyle, eating too much food high in fat, those with hyperthyroidism, hyperhomocysteinemia, or if you are a smoker or alcohol drinker.



*"What is the culprit of Dyslipidemia? It is when we eat foods high in saturated fats. Saturated fat only comes from animal foods such as pork, beef fat, chicken fat, butter and whole meat. Another cause is cholesterol. The desirable level of cholesterol for an adult 20 years and older is less than 200 milligrams per decilitre. The borderline high is 200 to 239 milligrams per decilitre and we should avoid that,"* explained Ms. Velandria.

She further reported that the blood plasma cholesterol is only from 180 to 250 milligrams per 100 millilitres. The normal recommendation of the cholesterol intake is below 300 milligrams. **"Did you know that an ordinary chicken egg contains 260 milligrams cholesterol already? If you will eat duck egg, it is higher. If you will eat quail egg it is even higher,"** revealed Ms. Velandria.

Aside from saturated fat, other types of fat are monounsaturated and polyunsaturated fat. According to Ms. Velandria, monounsaturated fat sources are from avocado, cashew nut, peanut, canola oil, olive oil, olives, peanut butter and peanut oil. When it replaces the saturated fat, it decreases one's total cholesterol as well as the bad cholesterol without decreasing the good cholesterol. Polyunsaturated fat, on the other hand, are from vegetable oils. Its effect when it replaces saturated fats decreases also the total cholesterol, as well as the bad and good cholesterol.

To prevent dyslipidemia, Ms. Velandria said, *"The recommended total fat intake is 25 to 35% of your total kilocalorie requirement for the day. For example, your total*

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## Male testosterone decreases during fatherhood

The intensive demands of parenting require huge adjustments from both parents. However, the study, Cebu Longitudinal Health and Nutrition Survey, suggests that men undergo extra adjustment to cope better with child rearing. Encompassing three generations of participants in Cebu from the 1980's up to the present, the survey collected data on various aspects of human health and nutrition including, reproductive health and sexuality.

During the presentation of the results of the study at the Department of Health (DOH)

13th National Health Forum for Action, Dr. Nanette Lee-Mayol, Research Associate at the University of San Carlos (USC) - Cebu City, shared that the level of testosterone in men is affected by courtship, marriage and subsequent fatherhood.

Researchers measured morning and evening salivary testosterone level of the 624 single, adult male participants. Baseline data were first collected in 2005. The test was repeated after four years in 2009 when some of the participants were already married. Study showed that levels of morning and evening

salivary testosterone of men who became fathers declined by 26% and 34%, respectively, whereas single non-fathers only experienced a decrease of 12% and 14% in their respective morning and evening testosterone level. Researchers also discovered that the men who spend most time with their kids are likelier to get lower testosterone levels than the others. These fathers whose youngest child was less than a month old experienced the most drastic decline in testosterone levels. Dr. Mayol revealed, *"The more involved you are in taking care*

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## Absence of vegetable oils increases amount of omega 3 fatty acids in tilapia

Scientists linked the absence of vegetable oils in fish feeds in the increased amount of omega-3 fatty acids in tilapia in the study entitled, “Effects of Feeds Containing Vegetable Oils on the Level of Omega-6 and Omega-3 Fatty Acids Present in Farm-Raised *Oreochromis niloticus* (Nile Tilapia).”

Since tilapia derives its essential fatty acids from its diet, researchers sought to uncover the effects of vegetable oils in fish feeds in the amount of omega-3 fatty acids present in farmed tilapias. Researchers explained, *“There are certain factors that contribute to the fatty acids composition of tilapia. Since, this fish grows rapidly on feeds containing low protein level and wide range of fat sources, formulated feed was considered one of these factors.”*

Samples of tilapia were taken from the provinces of Laguna, Nueva Ecija and Cavite. Researchers noted that feeds given to tilapias in Laguna and Nueva Ecija have high vegetable oil content, whereas fish from Cavite were only fed with fish meal and old bread. Omega-3 levels were measured from the samples.

Scientists discovered that it was not the presence, but rather the lack, of vegetable oil that increases the amount of omega-3 fatty acids. Tilapia samples from Cavite yielded 15 times higher omega-3 content compared to the samples from Laguna and Nueva Ecija.

Researchers stressed that the result of the study could help scientists, nutritionists and farmers produce more nutritious fishes for the consumers. “As such, they will be able choose the type of feeds they want to provide for their fish in order to make it a healthy source of nutrients,” they said. ● (Richmond Q. Acosta)

## Researchers pinpoint safety as motivating factor for men to get vasectomy

Researchers at the University of the Philippines Manila – Philippine General Hospital (UPM-PGH) discovered that safety is the only factor that affects men’s willingness to undergo vasectomy.

Vasectomy is a form of surgical procedure done on males as a form of contraception. During the procedure, both vas deferens, the pathway of sperm cells from the testes, are severed in order to prevent the sperm cells from mixing with seminal fluid. Even though highly effective, many are still very hesitant to go through the procedure.

In a study entitled, *“A Questionnaire Survey on the Knowledge, Attitudes and Beliefs Regarding Vasectomy of Male Patients Consulting in the Philippine General Hospital,”* UPM-PGH researchers investigated the factors that increase the willingness of men to get vasectomy.

A total of 1120 adult male patients consulting in the UPM-PGH were included in the survey. Information regarding their marital status, length of marriage, number of children, level of education, economic status, religion and type of mass-media exposure were taken and compared to their knowledge, attitude and belief about vasectomy.

Research results showed that only 518 or 46.2% of the men have knowledge about vasectomy. Among these 518, only 451 men knew that the vas deferens are ligated during the procedure. Men who are not Roman Catholics, have higher level of education and have experienced or currently using contraceptives were found to have more knowledge about vasectomy. However, researchers asserted that these factors do not always equate to enthusiasm to go through the surgery. Researchers pinpointed safety as the only factor that increases men’s eagerness to have vasectomy. They explained, *“Only knowledge about the safety*



*of vasectomy was shown to influence men's willingness to undergo the procedure.”* Researchers concluded that increasing awareness on safety is the best way to encourage men to undergo vasectomy. They said, *“Improved awareness on safety and reversibility of vasectomy may lead to increased acceptance of the procedure among Filipino men.”*

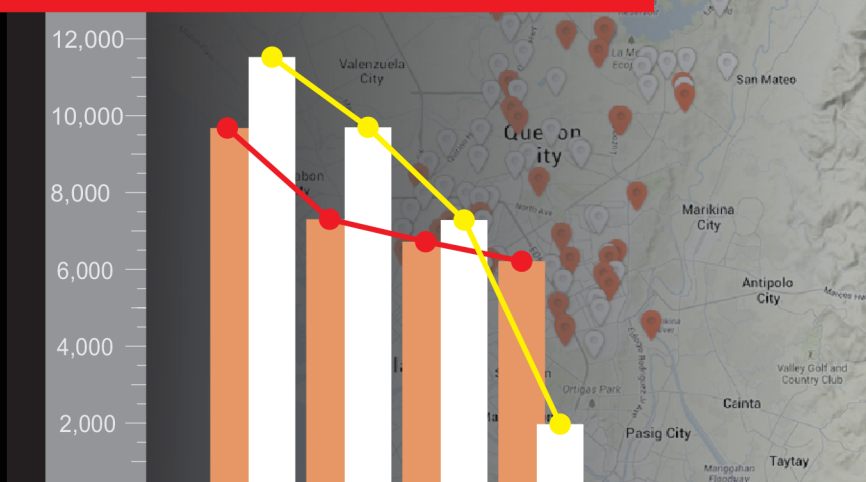
Adding that doctors and the mass media play important roles in disseminating information, the researchers stressed, *“Physicians play an important role in the dissemination of information about contraception, alongside the mass media, and should make efforts to ensure that adequate and accurate information is made available.”* ● (Richmond Q. Acosta)

# Dengue Bulletin



## Dengue Trend - First Quarter 2013

Dengue cases compared same period last year



## Quick Facts

# 30,220

reported cases from January to April 20, 2013

# 8.16%

higher compared to same period last year



Regions with highest dengue cases

**Region VII**  
**Region IV-A**  
**Region XI**



Cities in Metro Manila with highest dengue cases

**Quezon City**  
**Manila City**  
**Kalookan City**

## Dengue cases per Region

Region	2013	2012	% Change
I	502	911	-44.90
II	814	1120	-27.32
III	2107	5517	-61.81
IV-A	3716	3830	-2.98
IV-B	557	241	131.12
V	691	536	28.92
VI	2732	1010	170.50
VII	4553	2421	88.06
VIII	1107	158	600.63
IX	1756	1081	62.41
X	1716	804	113.43
XI	3006	1835	63.81
XII	2583	855	202.11
ARMM	354	125	183.20
CAR	433	477	-9.22
CARAGA	1057	412	156.55
NCR	2536	6607	-61.62
<b>Total</b>	<b>30,220</b>	<b>27,940</b>	<b>8.16</b>

## Metro Manila

Municipality	2013	2012	% Change
Kalookan City	283	688	-58.87
Las Piñas City	90	207	-56.52
Makati City	87	189	-53.97
Malabon City	131	233	-43.78
Mandaluyong City	90	119	-24.37
Manila City	411	1184	-65.29
Marikina City	102	126	-19.05
Muntinlupa City	77	94	-18.09
Navotas City	56	78	-28.21
Parañaque City	155	447	-65.32
Pasay City	134	215	-37.67
Pasig City	163	485	-66.39
Pateros	7	76	-90.79
Quezon City	496	1781	-72.17
San Juan City	39	66	-40.91
Taguig City	67	270	-75.19
Valenzuela City	148	348	-57.47
<b>Total</b>	<b>2,536</b>	<b>6,607</b>	<b>-61.62</b>

Based on DOH's National Epidemiology Center dengue surveillance report from January 1 to April 20, 2013

## Male testosterone decreases during fatherhood

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of the children, especially the very young ones, the lower your testosterone.”

Though there were researches made on primates showing similar results, no other paper has been published yet that links child rearing with decline in testosterone in human males until the Cebu longitudinal study. The study was the first to conclusively connect child rearing to lowered testosterone levels in men.

While traditionally, child rearing has always been designated solely as a woman's responsibility, the study proves otherwise. The researchers explained that while high testosterone ensures mating success in men, the steep decline in testosterone level showed that men are innately wired to actively help in the child rearing. Dr. Mayol stressed, *“Testosterone is often high during mating periods but then declines to allow for caregiving of the resulting children.”* ● (Richmond Q. Acosta)



## Inhaled corticosteroids more effective treatment for asthma

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Results of the study showed that there is a significant decrease in the severity of the asthma or exacerbation among patients who received ICS. The meta-analysis shows that ICS was more effective than MON in preventing asthma exacerbations in children with age 2-18 with mild to moderate persistent asthma. However, treatment with ICS is associated to causing oral thrush and hoarse voice but despite these, ICS has still greater efficacy. Dr. Saulog-Katigbak stressed,

“Despite these issues, inhaled corticosteroids are still the most effective controller

therapy for asthma in children and therefore the recommended treatment for pediatric patients.”

Granting the superiority of the ICS over MON based on the meta-analysis, Dr. Saulog-Katigbak underlined, “It is recommended to do a meta-regression to further investigate heterogeneity among the studies further. This will examine the relationship between study level characteristics such as aspects of the interventions, the settings or the methodological designs and the sizes of effects observed in the studies.” ● (Jessica Marie R. Suerte)

## FNRI complementary snack foods ready for adoption

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Although entrepreneurs were willing to adopt, absence of facilities and equipment required for production are their main concerns.

“DOST should provide some basic equipment through DOST regional offices to prospective adopters, (but) the adopters should provide facilities and capital for the production,” researchers stressed. They hope that since the technology is already available, processing parameters would be refined to fast track the transfer and

commercialization of complementary foods throughout the country. ● (Jessica Marie R. Suerte)



## Test and treat approach apt to eliminate HIV

An unprecedented acceleration in the number of human immunodeficiency virus (HIV) cases in the Philippines deviates from the decreasing trend in other low- and middle-income countries. Joint United Nations Programme on HIV/AIDS (UNAIDS) reported that the Philippines was one of the only seven countries in the world with evident increase of 25% in HIV incidences in the past decade.

*"Unprecedented increase in the recent years seems to indicate that a large epidemic is only a matter of time,"* said Dr. Edsel Maurice Salvaña of University of the Philippines Manila.

With the alarming increase of HIV cases, Dr. Salvaña conducted a study titled, HIV in the Philippines: A Prime Target for Elimination through Test-and-Treat. It aimed to examine the potentially catastrophic economic and social impact of HIV in the Philippines, underlining urgency for action prevention and treatment and proposing evidence-based strategy for elimination.

The study examined the Philippine case by looking at studies on transmission, prevention, and most at risk groups. Dr. Salvaña discussed the social and economic implications of HIV since its transmission has been associated with the local call center industry, social media networks, and on-line dating. The study provides a

compelling rationale for a 'test and treat' approach to reverse the accelerating numbers of HIV in the country.

Test and treat strategy means taking HIV drugs even before symptoms appear reducing the person's risk of transmitting the virus. The study concludes that the approach is financially feasible and efficient in anticipation of continuing trend on increasing HIV cases. *"Although the biggest challenge of test and treat is case finding,"* said Dr. Salvaña. Case finding is surveying the population to find those who are infected, an essential step in eradicating any type of disease.

Adopting the strategy would also require changes in legislation and policy so

as to implement a strong treatment for prevention program and aggressive case finding. Granting there are difficulties in implementing the strategy, Dr. Salvaña stressed, *"Filipino HIV patients at this early stage of the epidemic have the potential not only to clinically benefit but can also serve to reverse and even eliminate HIV in the country."* ● (Jessica Marie R. Suerte)

“Filipino HIV patients at this early stage of the epidemic have the potential not only to clinically benefit but can also serve to reverse and even eliminate HIV in the country.”

## FNRI-DOST develops DOST PINOY, a nutrition intervention strategy

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blends were eventually accepted among the children. Consequently, there is also an increase in the children's energy and protein intake. *"The findings suggest that complementary feeding plus nutrition education among mothers/caregivers is effective in improving the nutritional status of underweight infants and young children,"* researchers said.

Study affirms that mother's knowledge on basic nutrition plays a vital role in increasing the receptiveness to nutritional requirements of their infants and improving complementary feeding practices. *"The knowledge on health and nutrition concepts of mothers/caregivers improved,"* reported researchers. This was further supported by the concepts known before and after the intervention among mothers.

Recognizing the effectiveness of the intervention strategy, the researchers stressed, *"The DOST PINOY intervention strategy could be adopted in future feeding programs to improve the nutritional status of infants and young children."* ● (Jessica Marie R. Suerte)

## Policies, social marketing & community organizing can alter behavior towards tobacco use

*"Ever since 2003, we could not feel an enforcement of the Tobacco Regulations Act. Smoking prevalence is 27% and there is no significant decrease even though we have the law already," stressed Dr. Maria Soledad Antonio of the Department of Health (DOH) during her presentation at the 13th National Forum on Health Research for Action.*

Weak enforcement of tobacco regulations in the country pushed Dr. Antonio in conducting a study which will initiate policy change in 12 Philippine provinces. The study aimed to determine if synergistic intervention of policy change, social marketing and community organizing will make a difference in the selected pilot provinces with functional health systems.

*"We lobbied to the policymakers, to the mayors, and governors for a smoke-free law at the local level. Simultaneously, we developed communication plan together with the policy change. And then, after passing the ordinance in the locality, we trained enforcers so that they know how to enforce," explained Dr. Antonio.*

Challenges that they encountered during the course of the study, according to Dr. Antonio, include the readiness among local chief executives, pressure from business establishments and public utility vehicles not to implement tobacco control, opposition from the tobacco industry, and insufficient resources.

To address the challenges, Dr. Antonio's group organized visits to smoke-free cities and established a strong network with the civil societies at the local level and supported the passage of smoke-free ordinances which mandates business establishments and public utility vehicles to comply. The group also conducted public symposia and capacity-building seminars nation-



wide to support the implementation of the Joint DOH and Civil Service Commission Memorandum Circular (CSC MC) 2010-01 promulgating the policy of protecting the bureaucracy against unnecessary interaction with and interference from the tobacco industry.

*"Once we have public education, it's the people and the enforcers who will do the monitoring at the local level," said Dr. Antonio.*

For the resources, Dr. Antonio mentioned that they adopted the hard-hitting commercials on anti-smoking from other countries and negotiated with the local government units (LGUs) to fund the implementation of the smoke-free ordinance.

Changes have been noted after the implementation of the study. Results of the survey showed a marked decrease in terms of amount spent per month from buying cigarettes. From 300 pesos per month in July 2010, smokers spent an average of 162 pesos in August 2011. There is also a significant decrease in terms of second hand smoke in public transportation from 67% in 2010 to 47% in 2011, restaurants from 41%

to 28% and government buildings from 35% to 24% in 2011. Awareness of laws and ordinances that prohibit smoking in workplaces and enclosed public place have increased from 70% in July 2010 to 89% in August 2011.

The study concluded that comprehensive tobacco control policies implemented synergistically with social marketing, community organizing and capability building of local enforcers in a functional local health system would lead to changes in the knowledge, attitudes and behaviors of the public towards tobacco use.

*"Remain vigilant in guarding LGUs against tobacco industry interference. Implement hard-hitting tobacco control campaigns; encourage more LGUs to pass an ordinance and include measures to regulate tobacco products; localize national health laws to monitor if policies and ordinances that are being effectively implemented. Moreover, research must be done to monitor its effectiveness through national surveys and economic benefit studies to show that business will not fail when implementing anti-tobacco ordinances," recommended Dr. Antonio.* (Rachel Ann Doreen D. Nadal)

## Having problems with dyslipidemia, change your lifestyle

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calorie requirement per day is 2000 kilocalorie; 25 to 35% of 2000 is equivalent to 500 calories, divide it by 9 because 1 gram of fat is 9 calories and that is only 55 grams of fat."

For saturated fat, the recommendation is 7% of the total calories, equivalent to 15 grams of fat. While polyunsaturated fat is 22 grams and monounsaturated fat, 44 grams. "We also need dietary fiber, 25 to 30 grams of

soluble fiber. It absorbs all the excess food we take as well as toxins. So it is important that we eat lots of leafy vegetables," Ms. Velandria added.

As a reminder, she said, "If you have a problem of dyslipidemia, we have to really undergo a therapeutic lifestyle change; it is the primary and secondary prevention for dyslipidemia. You have to modify your diet, control your weight, increase your physical

activity, and stop smoking." ●  
(Rachel Ann Doreen D. Nadal)



## Study provides lessons for country's national health insurance program

Ever since the Philippine Health Insurance Corporation (PhilHealth) established the National Health Insurance Program (NHIP) in 1995, Filipinos are able to access affordable and quality health care services. NHIP was founded on the principle of social solidarity where members contribute resources to a common pool which everyone will have access in times of need.

However, even with the NHIP in place, Philhealth is still struggling in its mission to provide universal health coverage for all Filipinos because a large percentage of the population belongs to the informal sector. This sector has low or irregular incomes, unstable employment, and individuals not registered with any national government agency.

To provide lessons for NHIP in the country as it attempts to achieve its goal of mandatory health insurance for all, Dr. Noel Juban of the University of the Philippines Manila led the study titled, Conducting Systematic Reviews and Operations Researches on Specific Issues and Selected Priority Public Health Programs. The objective of the study is to compare voluntary or mandatory health insurance schemes in terms of enrollment, coverage or retention rates.

A systematic review of studies discussing established voluntary and compulsory health insurance programs were done to compare the two schemes. Results showed that in low- and middle-income countries, compulsory health insurance is only offered to the formal sector and only voluntary basis for the informal sector. It was also found out that employment, presence of illness, level of education, and income are major determinants of enrollment or retention.

The study recommends establishment of a co-payments scheme to counter moral

hazard and reduce adverse selection, simplification of enrollment procedures by providing on-site enrollment, and provision of job security for the informal sector. Acknowledging the importance of the sector, Dr. Juban said, "There is a need to study the informal sector in the Philippines more extensively, understanding the characteristics of this population will enable us to formulate concrete strategies to expand health insurance in this group and achieve universal health care for the Filipino people." ● (Jessica Marie R. Suerte)



## Maximize utilization of mobile clinics

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others and inadequate training on the use of facilities. In spite of these problems, the end users gave the mobile clinic program high overall assessment. The free health services, increased accessibility, and availability of competent health care providers are their reasons for the high ratings.

Granting the efficiency of mobile clinics, researchers noted, *"Although these mobile clinics are very beneficial, program implementers (of mobile clinic) recognize the need to further optimize these mobile clinics."*

The study recommends taking advantage of the clinic's mobility by maximizing the use of the mobile clinics for Geographically Isolated and Disadvantaged Areas (GIDAs). Dr. Morales also stressed, *"Program implementers are advised to conduct further research studies to in order to provide first-hand experience on implementation of the mobile clinic program."* ●

(Jessica Marie R. Suerte)

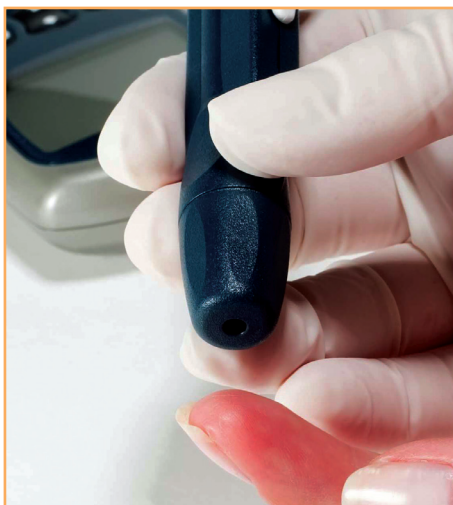


## A friendly diet for diabetics

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have an increased risk of developing high blood pressure, the result of excess sodium in diet. Ms. Orbeta advised, *"For diabetics, take less than 1,500 milligrams of sodium daily. Use herbs and spices instead of our bagoong and patis to improve the flavour of foods."*

Heart disease and stroke are also possible complications of diabetes, thus fat intake should be controlled too. Ms. Orbeta said, *"Fats should be consumed in minimal amount enough to support vital bodily functions. Cholesterol intake from food*



*must be limited to 200 milligrams per day if you have diabetes. Replace bad fats with good fats found in avocados, nuts, vegetable oils, fish and other monounsaturated and polyunsaturated fats and omega-3 fatty acids food sources."*

In the end, Ms. Orbeta stressed, *"To improve compliance, look at diet as an educational experience to learn what, when and how much to eat instead of thinking as it as restriction, deprivation of oneself to favorites."* ●

(Rachel Ann Doreen D. Nadal)



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## HEALTH R&D NEWS

### Inhaled corticosteroids more effective treatment for asthma

Asthma is the most widespread chronic respiratory disease of childhood and it is one of the leading causes of preventable hospitalizations. *"Six hundred million people worldwide suffer from Chronic Obstructive Pulmonary Disease (COPD) while 12% of Philippine population of 90 million has asthma,"* according to the World Health Organization (WHO).

Asthma is a condition of the lung airways resulting in episodic airflow obstruction making breathing difficult. Allergies and irritants are the most common triggers of the signs and symptoms of asthma. Although asthma has no cure it can be controlled.

Most people with asthma take inhaled corticosteroids (ICS) and Montelukast (MON) to prevent and treat their asthma. ICS are the cornerstones of anti-inflammatory asthma treatment and recommended by the National Asthma Education Prevention Program (NAEPP) as treatment of choice for all patients with persistent asthma. On the other hand, MON is in the form of chewable tablets enabling easy administration so it has higher compliance among patients.

These two forms of medication had been administered by most asthma patients but there has been no meta-analysis study evaluating MON vs. ICS. For this reason, Dr. Renee GhayneSaulog-Katigbak, of Cardinal Santos Medical Center, conducted a study titled, *A Meta-analysis on Montelukast versus Inhaled Corticosteroids for Mild to Moderate Persistent Asthma in Children*. The study aimed to compare the efficacy of MON vs. ICS in children 2 to 18 years of age with mild to moderate asthma. It assessed reports and studies comparing MON and ICS for asthma in an exclusively pediatric study population.

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## OTHER HEALTH RESEARCH NEWS

### Maximize utilization of mobile clinics

One of the challenges in the Philippine health care delivery system is bringing accessible medical services to rural remote areas. To address this, the Department of Health (DOH) rolled out mobile clinics in different regions of the country where health services are insufficient.

A mobile clinic is a self-contained vehicle run by a medical team and furnished with equipment aimed to provide health care services. These are usually used for its mobility and versatility to be tailored into the needs of the community.

To assess the efficiency of these mobile clinics, Dr. Noel Juban, chair of the Department of Clinical Epidemiology at University of the Philippines Manila, together with Dr. Ilian Dominiq Eusebio and Dr. Merrylle Morales, conducted the study titled, *An Analysis of the Performance and Utilization of DOH Mobile Clinics in Eight Hospitals in the Philippines*. The study aimed to describe the performance and utilization of the mobile clinics. Four of the mobile clinics were deployed in National Capital Region (NCR), two in Luzon, and two in Mindanao.

Researchers used key informant interviews, field inspection, records review and patient feedback for their analysis of performance and utilization. Results showed that most mobile clinics offered diagnostic examinations including blood, urine, ultrasound, ECG and X-ray, primary health care consultation, and drug dispensing for their services. Researchers discovered that the most common problems encountered were equipment damage, lack of consumables such as reagents, tracing papers among

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