

DIAGNOSTICS

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WHY DO YOU NEED OMEGA-3? PREVENTING BIRTH DEFECTS



Things You Need
To Know About
Cervical Cancer
And HPV

**INSIDE:
WORLD
HEALTH
DAYS 2016**



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Diagnostics Update.com

Private Bag 283, Gaborone
Tel: 395-0007, Fax: 395-7980
www.diagnostics-update.com
Email: ddiagnostics@yahoo.com

Advertising Sales & Copyrighting Editor

Mothusi Jowawa

Editor:

Mothusi Jowawa
72482503 / 73584988 / 72199228

Dear Reader,

One of the great aspects of this job is having the opportunity to talk with and listen to the many different manufacturers, distributors, and of course the huge network of dealers that is the backbone of our industry.

Years ago I never would have ever imagined I would be in this

position, and it is amazing. To say I really enjoy this job is an understatement.

What makes Diagnostics Update.com so unique is their informative and educative ways to the nation.

The staff and management is always looking for ways to inform their readers on how to tackle different medical issues. Basically, you want more people

to enjoy reading more and more.

That said, there is still the need to get more readers to embrace healthy routines within and outside the homestead. This March 2016 issue we focus more on the winter/spring season ailments. We take a look at different ways to keep healthy.

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treat, cure, or prevent any disease without the supervision of a medical doctor. Please be advised that medical information changes rapidly and new discoveries are being made on a daily basis. Therefore, some information in this publication may have change by the time you read it.

WORLD CANCER DAY

The theme of the World Cancer Day 2016-2018 will be "We can. I can."

World Cancer Day is a global observance that helps raise people's awareness of cancer and how to prevent, detect or treat it.

What Do People Do?

People, businesses, governments and non-profit organizations work together on World Cancer Day to help the general public learn more about the different types of cancer, how to watch for it, treatments and preventative measures. Various activities and events include:

- Television, radio, online and newspaper advertisements and articles that focus on the fight against cancer.
- Nationwide campaigns targeted at parents to help them minimize the risk of cancer within their families.
- Breakfasts, luncheons or dinners aimed at raising funds for cancer research or projects

that help to fight cancer. Many of these events feature keynote speakers or video presentations.

- Public information booths featuring information kits, fact sheets, booklets, posters and other items that promote the cancer awareness, prevention, risk reduction, and treatment. Some countries use World Cancer Day to promote campaigns on various cancer issues, such as breast cancer, lung cancer, skin cancer, and cancer in children. Much focus goes towards awareness and risk reduction.

The World Health Organization (WHO), which is the United Nations' (UN) directing and coordinating health authority, works with organizations such as the International Union Against Cancer (UICC) on this day to promote ways to ease the global burden of cancer. Recurring themes over the years focus on preventing cancer and raising the quality of life for cancer patients.

Public Life

World Cancer Day is a global observance and not a public holiday.

Background

Cancer is a leading cause of death around the world, according to WHO, which estimates that 84 million people will die of cancer between

2005 and 2015 without intervention. Low-income and medium-income countries are harder hit by cancer than the high-resource countries. It is essential to address the world's growing cancer burden and to work on effective control measures.

World Cancer Day is part of the World Cancer Campaign, which responds to the Charter of Paris adopted at the World Summit Against Cancer for the New Millennium on February 4, 2000. It called for a strong alliance between researchers, health-care professionals, patients, governments, industry partners and the media to fight cancer.

The Charter of Paris designated February 4 each year as World Cancer Day. UICC is responsible for coordinating World Cancer Day globally. It receives support from various partners and organizations, including the World Health Organization, the International Atomic Energy Agency, and other international bodies. UICC organized the first World Cancer Day in 2006.

Symbols

There are different symbols that are used to help promote the fight against different types of cancers. For example, the pink ribbon is a global symbol of breast cancer awareness, while the orange ribbon is associated with child cancer awareness. Another example is the daffodil, which the American Cancer Society sees as a symbol of hope that people share for a future where cancer is no longer a life-threatening disease.

Things You Need To Know About Cervical Cancer And HPV

"Education, prevention awareness, early detection and lowering risk factors are all important weapons in this battle against the second most common type of cancer for women," said Dr. Keri Bergeson, a physician for Columbia Valley Community Health. Here are four things you need to know about cervical cancer and HPV.

- Early detection saves lives

Regular screenings are critical for early detection and treating abnormal cell change. Human papillomavirus, or HPV, is the main cause of cervical cancers. HPV and Pap testing are critical to identify high-risk types of HPV found in 99 percent of cervical cancer cases. Bergeson recommends that most women between 21 and 29 have a Pap test every three years, and most women between 30 and 64 have a Pap test and HPV test together every five years or a Pap test alone every three years. Many factors affect these recommended guidelines, so talk to your health care team about a plan that's best for you. The survival rate for cervical cancer decreases as the cancer progresses undetected. Following the recommended Pap and HPV testing guidelines can save your life with early detection.

- HPV is common

Most sexually active people have HPV at some point. HPV can be low risk but still cause genital

warts, or high risk and cause cancers of the cervix, vulva, vagina, penis, anus and even certain head and neck cancers. The good news is that 90 percent of HPV infections resolve naturally within two years, and the virus is preventable through vaccinations and practicing safe sex.

- Prevention is possible

In addition to not smoking and maintaining a healthy lifestyle and diet, the best way to prevent cervical cancer is with regular testing for pre-cancers.

The best way to prevent pre-cancers is by avoiding exposure to HPV. If you are sexually active, wearing a condom during sex and limiting the number of sexual partners can reduce your risk.

Getting an HPV vaccination is also recommended, and several vaccines protect against the high risk cancer causing HPV types. Vaccination is recommended for girls beginning at age 11. Women who have been vaccinated still need to have regular Pap tests, vaccines are recommended for all females and males through age 26.

- Knowing symptoms and risk factors leads to prevention

Because pre-cancer and cervical cancer are often asymptomatic, regular screenings are important. Symptoms that signal an advanced stage of cervical

cancer may include abnormal or irregular vaginal bleeding, pain during sex, bleeding after sex, pelvic pain (not menstrual cramping) or vaginal discharge. Notify your primary care provider if you have any of those symptoms, which could also be related to other health problems.

Having a risk factor doesn't mean you will get the disease, but being aware of them is important. In addition to HPV, infections such as HIV and chlamydia increase your risk of cervical cancer. Other risk factors include smoking, having a diet low in fruits and vegetables, being overweight, having a baby when you are younger than 17, having multiple full-term pregnancies, long term use of birth control pills and having a family history of cervical cancer.

Cancer is serious and scary, but if you have a healthy lifestyle, get regular testing and limit your risk factors, you may be able to avoid this preventable disease.

Talk to your partner, your children and your doctor about HPV, the most common sexually transmitted infection and the leading cause of cervical cancer in women.

Sponsored content provided by Columbia Valley Community Health
source: The Wenatchee World

PREVENTING BIRTH DEFECTS

A birth defect is a condition present at birth that causes structural or biochemical changes in one or more parts of the body. Birth defects may be inherited or environmentally induced.

The incidence of birth defects is a serious problem that impacts the health and development of many babies and their families on a daily basis. For some birth defects, the cause is known, but for most birth defects the causes are still unknown. Recent discoveries, such as the importance of knowing family health history, consuming adequate levels of folic acid, eliminating alcohol intake during pregnancy, and avoiding toxic exposures in the workplace, highlight important steps that can be taken to improve individual health, as well as to reduce the risk of birth defects in future pregnancies.

DID YOU KNOW?

- **Every 4 ½ minutes a baby is born with a birth defect.**
- **One in every 33 babies is born with a birth defect.**

Still, many in the general public, many women of childbearing age and even some health care professionals remain uninformed or misinformed about the impact that prevention efforts can have on improving pregnancy outcomes.

Various initiatives have emerged encouraging people to both establish prevention programs to reduce the occurrence of birth defects and to promote early intervention programs to prevent secondary disabilities associated with birth defects in children. Originally a Birth Defects Prevention Handbook was created as a tool to train about the known causes of and prevention strategies for birth defects.

It is also important to note that, despite the best maternal health, quality prenatal care and preventive steps taken on the part of parents and their health providers, not all

birth defects can be prevented. Therefore, it is essential to do the best possible with the information available to assure the highest quality of life through available primary and secondary prevention measures. People with special needs make important contributions to society.

Disability is a natural part of the human experience and people with disabilities who live among us make immeasurable contributions to our culture as a whole.

Medical science is far from finished with the job of identifying the causes, treatments, cures and prevention strategies for all birth defects.

Nevertheless, significant strides have been made in the field of birth defects prevention. Everyone is encouraged to use the birth defects prevention information presented here to generate discussions with their health care providers, and work towards improving individual health status as well as the health of future generations.

Source:<http://www.nbdpn.org/bdpm2016.php>.



EYE PRESSURE IN GLAUCOMA AND DRY EYES

By: **Bel Marra**

January is national glaucoma awareness month and so at Bel Marr Health has compiled together the best of glaucoma health news articles for you to enjoy and educate yourself about this serious eye problem which can rob you of your vision.

In its early stages glaucoma does not present itself with many symptoms and so it can progress quite significantly without even knowing it. If detected early on glaucoma can be controlled and well managed but if caught later on, any damage already caused cannot be reversed. This is why it's so important to keep yourself informed in order to reduce your risk of developing glaucoma and keeping your vision.

So please enjoy the below articles in order to keep your eyes sharp and have you seeing for years to come.

Yoga positions may impact eye pressure in glaucoma patients



Certain yoga positions may impact eye pressure in glaucoma patients according to new findings. Positions which can increase eye discomfort in glaucoma patients are those where the head is in a downward position. Glaucoma is the leading cause of irreversible blindness and can impact a person's quality of life. When fluid pressure increases in the eye it leads to damage of the optic nerve and so minimizing fluid pressure can also work to reduce optic nerve damage which can contribute to blindness.

"While we encourage our patients to live active and healthy lifestyles, including physical exercise, certain types of activities, including pushups and lifting heavy weights, should be avoided by glaucoma patients due to the risk of increasing IOP and possibly damaging the optic nerve," study author Robert Ritch

explained. "This new study will help clinicians advise their patients on the potential risk associated with various yoga positions and other exercises that involve inverted poses."

Previous research only studied the headstand position and its effect on eye pressure in glaucoma patients. Those findings revealed that it increased intraocular pressure (IOP) two-folds. The new study had patients with and without glaucoma perform a variety of inverted yoga positions including downward facing dog, standing forward bend, plow, and legs up the wall. IOP was measured at baseline, again immediately when the pose was assumed, two minutes into holding the pose, immediately after the pose when the person returned to a seated position and last 10 minutes after resting.

Both groups of participants saw IOP increase after all four yoga positions with the greatest pressure during downward dog. Even after the participants returned to seated positions IOP still remained slightly elevated.

First author Jessica Jasien added, "While our study results don't show a dramatic difference in IOP between the normal participants and those with glaucoma, we believe that additional research, with a larger study population and longer durations of practicing the inverted positions is warranted. As we know that any elevated IOP is the most important known risk factor for development and progression of nerve damage to the eye, the rise in IOP after assuming the yoga poses is of concern for glaucoma patients and their treating physicians. In addition, glaucoma patients should share with their yoga instructors their disease to allow for modifications during the practice of yoga."

It is important that glaucoma patients partake in physical activity but they should be mindful of positions that can worsen glaucoma.

Increased visual scanning helps glaucoma patients drive



By: **Mohan Garikiparathi**

For individuals with glaucoma – a condition leading to vision loss – researchers found that increased visual scanning behavior can improve their ability to drive and pass a driving test. To compensate for visual impairment, glaucoma patients can use increased scanning, especially frequent eye and head movements. Anthony Adams, O.D., Ph.D., editor-in-chief of Optometry and Vision Science, said, "Like most people, many glaucoma patients with binocular peripheral visual field loss can make useful adaptations for their condition."

The research was conducted at a state-of-the-art driving simulator at the Mercedes-Benz Center. The participants were six individuals with glaucoma and binocular vision loss who all partook in the driving simulation. The simulation had close to real-life conditions with 360-degree visual projection, a real car and a moving base.

The test was 40 minutes long and the participants encountered a variety of traffic situations and hazardous situations. One example was a pedestrian suddenly appearing behind the parked car. If participants failed any one of the nine hazards presented, they automatically failed the whole test.

For comparison, eight normal participants also took part in the simulation. Head and eye tracking information was also recorded from both groups.

Half the glaucoma patients passed the driving test with performances that were impossible to differentiate from the control group. Those who passed showed an increase in visual scanning and exploration, which means they made more head and eye movements in comparison to those who failed. Dr. Enkelejda Kasneci, lead researcher, said, "Such behavior indicates an increased scanning activity in glaucoma patients who passed."

Although the sample size was small and vision loss varied among participants, all glaucoma participants were ineligible for a driver's license in many European countries.

Dr. Adams added, "For these patients, their successful adaptations appeared to involve making increased numbers of head and eye movements to the location of objects in what would normally be their peripheral vision."

Dr. Kasneci concluded, "This type of compensation improves traffic safety and may have practical implications in planning individualized driving fitness tests and driver rehabilitation programs."

The researchers recommend more individualized driving assessments.

Source: http://www.eurekalert.org/pub_releases/2015-10/wkh

DRUG & ALCOHOL

National Drug & Alcohol (US) connects students with scientists along with other experts for the purpose of counteracting myths related to drugs and alcohol from the internet, television, movies, music and other people. It was started in 2010 by scientists from the National Institute on Drug Abuse (NIDA) for stimulating educational events in communities so that teens can learn about the science of drug abuse and addiction.

The National Institute on Alcohol Abuse and Alcoholism will be a partner starting this year's observance and alcohol will be added as one of the main topics for the week. NIDA and NIAAA are actually part of the National Institutes of Health. Locally plan and hosted school and community activities that will focus on providing teens with scientific facts about drugs and alcohol.

One example is the Drugs & Alcohol Chat Day which is an event that requires registration. During the event, give participants the opportunity to ask questions about drugs, alcohol and drug abuse. It also covers how to help people who are abusing drugs, the causes of addiction and other essential facts.

Purpose

The main reason for creating the yearly event is to increase awareness of the risks of drug & alcohol abuse among teens.

This is because many of them are not aware of its effects on their health, to their school performance and the dangers when driving under the influence.

Experts believe that when teens are given the scientific facts about drugs and alcohol, they will be better prepared to make the right decisions for themselves and they can also share this vital information with other people.

Drug abuse usually starts during the teen years and this is the reason it is the perfect time to inform them of its dangers.



What You can do on Drug & Alcohol Abuse

- Use social media to spread awareness of Drug & Alcohol
- Talk to your family and friends about the dangers of drug/alcohol abuse and addiction
- Organize an activity in your school to help shatter the myths about drugs and drug abuse
- Participate in drugs and alcohol abuse campaign in your community
- Distribute educational materials regarding drugs and alcohol
- Contact your local newspapers, television stations and radio stations and ask them to make a public service announcement for Drug & Alcohol abuse
- Talk to your teachers about participating in

the Drugs & Alcohol Chat Day as a class

Special Tips on Drug & Alcohol Abuse

Here are tips for preventing drug/alcohol prevention for the youth:

Avoid Negative Peer Pressure – Pay special attention to who you hang out with. If ever you become a victim of negative peer pressure, do not be afraid to say no and make new friends.

Seek Help – If you or someone you know is having trouble with alcohol or/and drugs, do not be afraid to get help. Do not wait which can worsen the problem.

Take Control – You should take responsibility for your life and your actions. Speak up about the negative effects of alcohol and drugs and take the necessary steps to get rid of your problem if you have one.

Connect with Your Parents or Other Adults – You need to be able to talk to people about life and its challenges. You can benefit a lot from the life experiences of others. If you don't feel comfortable talking to your parents, try other responsible adults like your neighbour, relatives and teachers.

Get Educated About Alcohol and Drugs – You need to distinguish the myths from the facts in order to make the right decisions. Visit Learn About Alcohol and Learn About Drugs and share these websites with your friends.

Conclusion

An yearly observance presents the perfect opportunity to shatter the myths about drugs/alcohol and drug/alcohol abuse. We should all come together for a truthful conversation regarding drugs and alcohol and their effect on the body, brain and behavior. This annual event is for informing teens of the many dangers of alcohol and drug abuse so that they will be able to make the right decisions in the future.

Source: Consumer Health Digest

NATIONAL DONOR DAY MEANS LOVING IN A NEW WAY

On this day – and every day – signing up to be an Organ and Tissue donor, is a phenomenal way to share love and the gift of life with hundreds of others. I can think of no better way to express love than to celebrate National Donor Day.

Tissue donation specifically has the power to save and enhance hundreds of lives from a singular decision to become a donor. Bones, tendons, ligaments, heart valves, corneas, and skin are donated everyday to help those who need their lives restored – getting them back in the game of life. These one-of-a-kind gifts repair and restore function to knees, backs, shoulders, ankles,

hips, hearts and sight. When you say yes, others receive your gift and carry forward your legacy of generosity and love.

At Donor Services, there are unique abilities to work within the organizations, organ procurement organizations and other tissue bank – Donor Services – takes great care in preparing these wonderful gifts for transplant. That's how many recipients receive the gift of life. But we can't fulfill our mission and combat the staggering disparity in those who need transplants and available organs and tissue without your help. We are charged with a great responsibility, as stewards of the gift, to ensure each

donation and tissue transplant are safe and appropriate for the intended use.

It is a great profession, Tissue Banking, touching so many lives in a positive way, sharing our passion for the work by caring for these gifts, ensuring they get to those in need of a transplant. Every day is honoured to those who have made the decision to donate their Organs and Tissues to others. We see the power of restored lives and the results for the greatest expression of love. It's easy, and this small gesture can make a massive impact—and save someone's life.

Source:www.donatelifetn.org



DIAGNOFIRM IS NOW USING AQUIOS CL FLOW CYTOMETERS

Aquios CL analyzer



Diagnofirm's Ashley excited to be working on the Aquios CL



Aquios CL analyzer



**DIAGNOFIRM
MEDICAL LABORATORIES**
has replaced all their flow
cytometers with the Beckman
Coulter's Aquios CL load and
go system in all the labs.

The Aquios CL has:

- Automated sample preparation - automatic matching of sample identification code with the test request, all sample preparation and analysis performed in 96-well microplates, automatic launch of applicable testing protocol, automatic dispensing and mixing of applicable

reagents and no manual pipetting or de-capping of primary tubes

- Smart Track Reagent Management - preloaded with a range of barcoded reagents and consumables, automatic barcode scanning to track reagents, lot numbers, open and closed vial expiration dates, and number of tests left in each vial and continuous tracking of reagent usage by product
- Full bi-directional LIS connectivity - automatic retrieval of test requests and transmission of test results, no need for additional workstations or software, no need to create or download worklists manually
- Automated system setup - preprogrammed protocols in support of applications, no fluorescent beads for setup or absolute counts

and no manual system or controls optimization

- Continuous loading via cassette autoloader - accommodates a variety of tube sizes, continuous, random loading and unloading, separate single-tube loader for STAT samples, open vial samples, and/or irregular tube sizes
- Comprehensive Quality Control - barcode tracking means no manual QC or reagent logs, generates a full, easily reviewable audit trail and should QC fail, operator is alerted via text message or email

DIAGNOFIRM OPENING IN PALAPYE SOON

Diagnofirm Medical Laboratories will be opening a new testing branch in Palapye soon. This brings the total number of testing laboratories to six including Gaborone, Francistown, Maun, Kazungula and Selebi-Phikwe. The opening of the Palapye branch will result in improved turnaround times as doctors and patients in Palapye, Serowe and Mahalapye will get most of their results on the same day. The proximity of the service will also result in significant cost savings for our customers. This is in line with the company's vision "...to provide an effective and efficient testing service at affordable cost to all our customers..." and also "...dedicated to providing accurate pathology results in a timely manner..."

When the Palapye Laboratory opens following routine tests will be available on site:

Haematology:

Full blood counts, Blood group, ESR and direct coombs

Chemistry:

Urea and Electrolytes, creatinine, uric acid, liver function tests, amylase, cardiac enzymes, lipid profiles, calcium, magnesium, phosphate, glucose (fasting and random), glucose tolerance test and HBA1C

Microbiology:

Malaria parasites

Serology:

CRP, ASO, RA factor, drugs of abuse, HIV Elisa, skin test (inhalents), Hepatitis B surface antigen Elisa, TPHA, RPR, Brucella agglutination, Weil Felix, Widal, -HCG (urine, blood)



Diagnofirm employees Peter and Naledi



Spacious Palapye main lab ready for equipment

All specialised tests and non-routine tests will be referred to the main laboratory in Gaborone.

We promise our doctors and patients an efficient, effective and timely service in Palapye. For further information about the services and expected timelines for starting operations, Doctors and patients can contact:

Diagnofirm Palapye on Plot , Phone 4900066, Fax 4900181, or Diagnofirm Main Laboratory, Plot 12583 Nyerere Drive, Middlestar, Gaborone, Phone 3950007, Fax 3957980, email: lab@diagnofirm.co.bw



Entrance to the lab

WHY DO YOU NEED OMEGA-3?

As we all know, the human body can synthesize fat from the food we eat; the excess of food that we eat, after consumption is stored as fat in different parts of our body. There are saturated and unsaturated fats needed for human body, some of them are produced in the body, but some of them not. Omega 3 fatty acids come into a category of fat that cannot be synthesized in the body, but are necessary for the human body and health. The importance of inclusion of omega 3 fatty acids in our life and diet has been more popular as a result of outcoming research studies on the health benefits of omega-3's recently.

There are three types of omega-3 needed to our body; they are alpha-linolenic acid (ALA), eicosapentaenoic acid (EPA), and docosahexaenoic acid (DHA); out of which ALA we get from plant sources and EPA and DHA from animal sources especially fish.

Researches has shown that omega-3's reduce inflammation and may help to lower risk of chronic diseases such as heart disease, cancer, and arthritis.

How does taking omega-3's help in our body?

Heart disease: It is studied that omega-3's especially EPA and DHA from fish oils help to reduce risk factors

for heart disease, lower the risk of death, heart attack, stroke, and abnormal heart rhythms in people who have already had a heart attack. Fish oil also helps to slow down process of formation of clots and plaques in the arteries of heart. So always remember to eat foods that are rich in omega-3 fatty acids and low in saturated fat to protect your heart.

Life style diseases: Studies shows that regular use of fish oil supplements reduce triglyceride levels and increases HDL levels in the blood. Taking diet rich in omega-3's can reduce high blood pressure too.

Inflammatory diseases: Evidences show that fish oil helps to reduce symptoms of arthritis including rheumatoid and osteoarthritis. Continuous intake of omega-3 helps to reduce joint pains, morning stiffness and inflammation of arthritis, long-term use can help to reduce even the dosage of NSAIDS used in the treatment of arthritis.

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WHY DO YOU NEED OMEGA-3?

FROM PAGE 10

Other inflammatory diseases like ulcerative colitis, Crohn's disease, psoriasis etc. found to have positive effect with omega-3 supplementation. Osteoporosis has also found to be lower in populations who eat more fish.

Brain support: Research shows cultures that eat foods with high levels of omega-3s have lower levels of depression. Omega-3s intake also helps to improve conditions such as bipolar disorder and schizophrenia, and it boosts the effects of antidepressants in the treatment of depression. It also helps to protect brain from ageing disorders like dementia, age related memory loss and Alzheimer's in old age people. Omega-3 has shown to reduce behavioral problems in children with ADHD, and improve their thinking, remembering and learning skills.

Cancer prevention:

Epidemiological evidence shows men who eat more fish have a lower risk for prostate cancer, and omega-3's reduces the risk of colorectal cancer also. Studies show breast cancer patients responds better to chemotherapy and the cancer was less likely to spread when patients were given omega-3 fatty acids. Being with so many beneficial effects to human health and disease prevention, do we include enough omega-3 in our diet? From where, we can get omega-3's? Edible seeds like walnut, flax, hemp etc.

and green leafy vegetables are the main sources of vegetable omega-3 called ALA. The concentration of omega-3 increases when these are turned into oils. Flax oil, Hemp oil, sage seed oil, etc contain higher concentration of ALA. Other form of omega-3, EPA and DHA is mainly obtained from fish and fish oils. Salmon, krill, tuna, sardine, mackerel, squid etc. contain high concentration of EPA and DHA omega3's. Including all these vegetable and fishes into your daily diet can help to get enough omega-3's to the body.

How much omega-3 should be taken a day?

Most research studies have found a positive benefit with 500 to 1,000 milligrams of omega-3s per day. The American Heart Association (AHA) recommends all adults eat a variety of fish, particularly oily fish, at least twice weekly, which would provide an average of 500 mg daily. For patients with coronary artery disease, AHA recommends 1,000 mg daily, or double the seafood requirement.

Due to demographical peculiarities, all areas cannot get enough fish diet. One among them is Botswana, being a landlocked country; it is very difficult for us to get fishes rich in omega-3. In such cases, omega-3 can be supplemented in the form capsules and oils. EPA and DHA

Tables	
Grams of omega-3 per 85g serving	Omega-3 (g)
Sardines	1.3-2.0
Salmon	1.1-1.9
Mackerel	1.1-1.7
Sword fish	0.97
Mussel	0.95
Tuna	0.21-1.1
Canned Tuna	0.23
Catfish	0.22-0.3
Eggs	0.109
Turkey	0.030
Broccoli	0.10-.020
Kiwi fruit/Strawberry	0.10-0.20

Common name	%ALA
Flax seeds	18.1
Flax oil	53-59
Hemp seeds	8.7
Hemp oil	8<
Chia seed oil	6@
Canola Oil	< 88
Butter Nut	8.7
Walnuts	6.3
Pecan Nuts	0.6
Hazel Nuts	0.1

are available in the form of fish oil capsules and for vegetarians, flax seeds, flax oil, hemp seeds, hemp oil etc. are available in the market. Omega-3's can interact with some of the medications; always consult with your health care practitioner before starting supplementation. If in raw form, flaxseed, flaxseed oil, fish, and krill oils should be kept refrigerated. If you are taking whole flaxseeds, it must be

ground within 24 hours of use, so the ingredients stay active. Regarding vegetable and fish source of omega-3, fish source seems to be more potent and effective than vegetable oil and seeds.

So include enough omega-3 in your diet either in the form of raw source or supplement and stay protected from a number of diseases and stay healthy always!

Article by:

Dr. K R Renjith BHMS
Homoeopathic physician
Health Alternatives
Gaborone, Botswana
Ph: +267 3700108/74052630
Email: drrenjith@healthalternatives.co.bw



flaxseed

WORLD HEALTH DAYS 2016

January

Cervical Health Awareness Month
National Birth Defects Prevention Month
National Glaucoma Awareness Month
National Radon Action Month
National Stalking Awareness Month
National Winter Sports TBI Awareness Month
Thyroid Awareness Month
3 - 9 National Folic Acid Awareness Week
25 - 31 National Drug and Alcohol Facts Week

February

AMD/Low Vision Awareness Month
American Heart Month
International Prenatal Infection Prevention Month
National Children's Dental Health Month
Teen Dating Violence Awareness Month
1 - 7 African Heritage & Health Week
4 World Cancer Day
5 Give Kids A Smile ® Day
5 National Wear Red Day
7 - 14 Congenital Heart Defect Awareness Week
7 National Black HIV/AIDS Awareness Day
14 National Donor Day
21 - 27 National Eating Disorder Screening Program ®

March

National Cheerleader Safety Month
National Colorectal Cancer Awareness Month
National Endometriosis Awareness Month
National Kidney Month
National Nutrition Month ®
Problem Gambling Awareness Month
Save Your Vision Month
Trisomy Awareness Month
Workplace Eye Wellness Month
6 - 13 National Sleep Awareness Week ®
7 - 11 National School Breakfast Week
10 National Women and Girls HIV/AIDS Awareness Day
10 World Kidney Day
13 - 19 Patient Safety Awareness Week

14 - 20 Brain Awareness Week
15 - 21 National Poison Prevention Week
16 - 22 Flood Safety Awareness Week
20 National Native American HIV/AIDS Awareness Day
22 American Diabetes Alert Day
24 World Tuberculosis Day
27 - April 02 Tsunami Preparedness Week

April

Alcohol Awareness Month
Irritable Bowel Syndrome Awareness Month
National Autism Awareness Month
National Child Abuse Prevention Month
National Distracted Driving Awareness Month
National Donate Life Month
National Facial Protection Month
National Minority Health Month
Occupational Therapy Month
Sexual Assault Awareness and Prevention Month
Sexual Assault Awareness Month of Action
Sports Eye Safety Awareness Month
STI Awareness Month
Women's Eye Health and Safety Month
3 - 9 National Youth Violence Prevention Week
4 - 10 National Public Health Week
5 Sexual Assault Awareness Day of Action
7 National Alcohol Screening Day ®
7 World Health Day
10 National Youth HIV and AIDS Awareness Day
12 - 23 National Infant Immunization Week
24 - 30 National Infertility Awareness Week
24 - 30 World Immunization Week
24 World Meningitis Day
25 - 29 Air Quality Awareness Week
25 - 29 Every Kid Healthy™ Week

May

Arthritis Awareness Month
Better Hearing and Speech Month
Food Allergy Action Month
Global Employee Health and Fitness Month

Global Youth Traffic Safety Month
Healthy Vision Month
Hepatitis Awareness Month
International Mediterranean Diet Month
Melanoma/Skin Cancer Detection and Prevention Month ®
Mental Health Month
National Asthma and Allergy Awareness Month
National Celiac Disease Awareness Month
National Osteoporosis Awareness and Prevention Month
National Physical Fitness and Sports Month
National Stroke Awareness Month
National Teen Pregnancy Prevention Month
Preeclampsia Awareness Month
Ultraviolet Awareness Month
1 - 7 Children's Mental Health Awareness Week
1 - 7 National Physical Education & Sport Week
1 - 7 North American Occupational Safety and Health Week
4 National Bike to School Day
5 Hand Hygiene Day
8 - 14 National Alcohol- and Other Drug-Related Birth Defects Awareness Week
8 - 14 National Women's Health Week
9 - 15 National Stuttering Awareness Week
12 - 16 National Neuropathy Awareness Week
14 Cornelia de Lange Syndrome Awareness Day
18 HIV Vaccine Awareness Day
19 National Asian and Pacific Islander HIV/AIDS Awareness Day
20 World Autoimmune Arthritis Day
22 - 28 National Hurricane Preparedness Week
23 - 29 Healthy and Safe Swimming Week
25 National Senior Health & Fitness Day ®
27 Heat Safety Awareness Day
31 World No Tobacco Day

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WORLD HEALTH DAYS 2016

FROM PAGE 12

June

1 - July 04 Fireworks Safety Month
Cataract Awareness Month
Men's Health Month
Myasthenia Gravis Awareness Month
National Aphasia Awareness Month
National Congenital Cytomegalovirus Awareness Month
National Safety Month
National Scleroderma Awareness Month
5 - 11 National Rip Current Awareness Week
5 National Cancer Survivors Day ®
13 - 19 Men's Health Week
19 - 25 National Lightning Safety Awareness Week
19 World Sickle Cell Day

July

Cord Blood Awareness Month
International Group B Strep Awareness Month
Juvenile Arthritis Awareness Month
National Cleft & Craniofacial Awareness & Prevention Month
28 World Hepatitis Day

August

Children's Eye Health and Safety Month
National Breastfeeding Month
National Immunization Awareness Month
Psoriasis Awareness Month
1 - 7 World Breastfeeding Week
7 - 13 National Health Center Week
22 - 26 Contact Lens Health Week

September

Childhood Cancer Awareness Month
Fruits & Veggies—More Matters ® Month
Healthy Aging ® Month
National Atrial Fibrillation Awareness Month
National Childhood Obesity Awareness Month
National Food Safety Education Month
National ITP Awareness Month

National Pediculosis Prevention Month/Head Lice Prevention Month
National Preparedness Month
National Recovery Month
National Sickle Cell Month
National Traumatic Brain Injury Awareness Month
National Yoga Awareness Month
Newborn Screening Awareness Month
Ovarian Cancer Awareness Month
Pain Awareness Month
Prostate Cancer Awareness Month
Sepsis Awareness Month
Sexual Health Awareness Month
Sports Eye Safety Month
Whole Grains Month
World Alzheimer's Month
5 - 11 National Suicide Prevention Week
10 World Suicide Prevention Day
13 National Celiac Disease Awareness Day
15 RAINN Day
18 - 24 National Farm Safety & Health Week
18 National HIV/AIDS and Aging Awareness Day
19 - 23 Malnutrition Awareness Week™
20 Get Ready Day
21 National School Backpack Awareness Day
22 Falls Prevention Awareness Day
24 Family Health & Fitness Day USA ®
28 National Women's Health & Fitness Day
28 World Rabies Day
29 World Heart Day
30 Sport Purple for Platelets Day

October

Domestic Violence Awareness Month
Eye Injury Prevention Month
Health Literacy Month
Home Eye Safety Month
National Breast Cancer Awareness Month
National Bullying Prevention Month
National Dental Hygiene Month
National Down Syndrome Awareness Month
National Medical Librarians Month
National Physical Therapy Month

Sudden Infant Death Syndrome (SIDS) Awareness Month
2 - 8 Mental Illness Awareness Week
5 International Walk to School Day
6 National Depression Screening Day ®
12 - 20 Bone and Joint Health Action Week
13 Metastatic Breast Cancer Awareness Day
15 National Latino AIDS Awareness Day
16 - 22 International Infection Prevention Week
16 World Food Day
17 - 22 National Healthcare Quality Week
17 - 21 National Health Education Week
19 World Pediatric Bone and Joint Day
22 International Stuttering Awareness Day
23 - 31 Red Ribbon Week
23 - 29 Respiratory Care Week
29 World Psoriasis Day

November

American Diabetes Month
COPD Awareness Month
Diabetic Eye Disease Month
Lung Cancer Awareness Month
Lung Cancer Awareness Month
National Alzheimer's Disease Awareness Month
National Family Caregivers Month
National Healthy Skin Month
National Hospice Palliative Care Month
National Stomach Cancer Awareness Month
19 Great American Smokeout
19 International Survivors of Suicide Day
20 - 26 Gastroesophageal Reflux Disease Awareness Week
24 National Family Health History Day

December

Safe Toys and Gifts Month
1 World AIDS Day
4 - 12 National Influenza Vaccination Week
4 - 10 National Handwashing Awareness Week



D-DIMER TEST IN VENOUS THROMBOEMBOLISM (VTE): A COMMON HIV COMPLICATION

Infection with the human immunodeficiency virus (HIV) is a global pandemic with approximately 37 million adults infected worldwide. People living with HIV / AIDS are at an increased risk of venous thrombo-embolism (VTE) consisting of deep vein thrombosis (DVT) i.e. blood clots in veins of the lower and upper limbs and migration of dislodged clot to the lungs (embolism). DVT also carries the risk of the dreaded post thrombotic leg syndrome (PTS) secondary to damage to the veins with chronic leg swelling, pain and ulceration. VTE adds significantly to the morbidity of HIV infection but can also be fatal resulting in sudden death.

General causes of VTE include trauma and surgery with HIV specific factors involving deficiencies of natural anticoagulants such as protein S and presence of procoagulants including microparticles. The symptoms of DVT i.e. leg pain and swelling are non-specific requiring proper diagnostic tests to confirm the presence of a clot in one of the veins. The diagnosis of VTE starts with clinical assessment aided by scoring systems such as the Wells score. Confirmation of the clinical suspicion is however required with D-Dimer testing followed by radiological visualisation of the clot with techniques such as ultrasonography and computed tomography (CAT) scan.

Various studies have elucidated

the association between HIV infection and VTE. The authors of a South African study titled Human immunodeficiency virus infection and acute deep vein thromboses¹ examined the factors contributing to the HIV prothrombotic state and resultant increased prevalence of VTE. HIV infected individuals on anti-retroviral therapy (ART) show improvement in the degree of hypercoagulability but complete resolution does not seem to occur. The persistent abnormal haemostatic system on ART results in thrombotic tendencies even in treated patients.

The D-Dimer test is a screening blood assay with a negative result ruling out VTE as the cause of symptoms. A positive D-Dimer result is non-specific i.e. it can be

raised in conditions other than VTE necessitating confirmatory tests. The D-Dimer test is therefore a simple, widely available blood test with an important role in the detection of VTE.

D-Dimer levels in HIV infected people can however be chronically raised due to opportunistic infections such as tuberculosis and in malignancies. These secondary diseases however independently further increase the risk of VTE. The pro-inflammatory HIV environment with elevated CPR and IL-6 are independently and positively associated with elevated D-Dimers.

HIV infection is therefore associated with a significant increased risk of VTE with the D-Dimer assay offering an easy screening test to detect this

serious disease process. Although the D-Dimer test is not specific to the presence of VTE, it is a sensitive screening assay with a high negative predictive value. If the D-Dimer result is negative, VTE is unlikely. Elevated D-Dimer levels on the other hand are important in detecting VTE. More widespread use of the D-Dimer assay can make a significant impact on early VTE detection.

¹Louw S, Jacobson BF, Büller H. Human immunodeficiency virus infection and acute deep vein thromboses. Clin Appl Thromb Hemost. 2008 Jul; 14(3):352-5. Epub 2007 Sep 25.

Article by: George M. Sefora (NDip. Biomed; BTech. PharmSci.), Kat Medical Laboratories
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