Vol.1 No.9 August - October '08

NHI Dialogue

Quarterly Health Magazine of Cardio Diabetes Research Society

Editor in Chief : V. K. Gujral

CDRS

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NHI Dialogue

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Quarterly Health Magazine of
Cardio Diabetes Research Society
and
National Heart Institute
For Private Circulation Only.

Editorial Voice

Dear Readers,

Hope , the summerish wet season has been enjoyable. Your magazine has been well received on net also. The number of suggestions has increased & we are trying to incorporate most of them in the forthcoming issues. The news from the world of diabetes is getting more space as per your asking.The membership form is attached for you to fill up and send us.

Grateful for your love & support , the NHI Dialogue enters it's third year !!

Wish you all a happy pre festive season & great reading !!!

Yours'

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Diet For Coronary Heart Disease and Artherosclerosis

Mrs Anuradha Sharma & Ms Shikha Chawla

Dietary factors: Dietary factors play an important role in this disease. The most important factors are fat and calorie intake. The micronutrients such as antioxidants, vitamins, minerals and trace metals play important roles in modifying heart disease. Low calorie, low saturated fat, low cholesterol, high Polyunsaturated fatty acid, low carbohydrate, and normal protein, vitamins, mineral and high fibre diet is recommended.

Food items that are permitted in coronary heart disease.

Cereals - Wheat, rice, bajra, ragi, jowar and maize.

Pulses - Whole and sprouted legumes, dhals.

Vegetables - All vegetables.

Dairy products - Low fat milk and its curds.

Egg - Egg white.

Oils - Vegetable oils like corn oil, safflower oil, mustard oil etc.

Fruits - All fresh fruits preferably low calories fruits like papaya

Beverages - Fresh fruit juices (with out sugar), light tea.

Fish - Fish except shell fish.

Energy : The energy needs of an individual varies with age, sex and physical activity. Obesity, which is one of the risk factors of cardiovascular diseases, develops when energy intake is more than the energy expense. If your body mass index is over 25, you are over weight. So it is always advisable to have a normal ideal body weight. If you are over weight or obese, measures like weight reduction should be taken to maintain desirable body weight. Since the fats are calorie dense foods, it intake must be restricted and like wise carbohydrate intake must be limited. The diet should be adequate in protein. But very low calorie diets can result in physical, psychological and pathological consequences.

Fats : Dietary fat is important to ensure the optimum quantity and quality of fat in the total diet. Fat should provide a minimum of 15% of total calories and its quality should be such that it furnishes adequate linoleic acid and linolenic acid (essential fatty acids). High intakes of total fat and saturated fatty acids promote cholesterol synthesis to raise serum very low density lipoprotein (VLDL) and low density lipoprotein (LDL) cholesterol increase the risk atherosclerosis and thrombosis. Adequate intake of polyunsaturated fatty acids (PUFA) lowers blood cholesterol. The long chain omega 3 PUFA present in fish and fish oils are very good for the body.

In Indian diet the invisible or fat rich in PUFA is provided from cereals, millets, pulses, spices and vegetables. People in the middle age having one or more risk factors for cardiovascular disease should restrict fat intake to the minimum level of 20 gm / day. In general vegetable fats are better than animals fat with exception of fish fat which is very good. Like wise among vegetable source coconut oil and hydrogenated oils promote cholesterol synthesis and there by raise serum cholesterol.

Linoleic acids in various oils

Oils	Linoleic acid
Safflower, sunflower, corn and cotton seed	> 50 %
Rice bran, Ground nut, Rape seed, Mustard oil	20 - 40 %
Palm oil	10 %
Mustard and soya bean oils contain alpha linolenic acid	5 - 10 %

Carbohydrates : Carbohydrates and fats are related to each other in the metabolism and hormonal control. Excessive consumption of carbohydrate will increase the blood cholesterol level. Reducing the daily carbohydrate intake such as starches and excluding sugars such as sucrose, fructose and lactose controls this endogenous synthesis of cholesterol.

Diet For Coronary Heart Disease And Artherosclerosis

Proteins : Plant proteins have been found to have a cholesterol lowering effect as compared to animal protein. Adequate protein is recommended for daily requirement.

Food items that are to be restricted in coronary heart disease.

Cereals - Food prepared with refined wheat flour like maida.

Dairy products - Whole milk.

Fat - Total intake to be restricted.

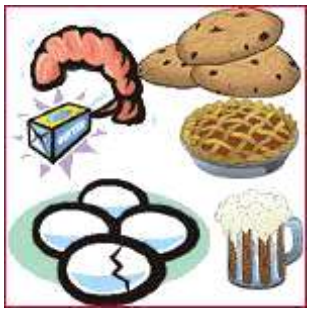
Sugar - Sugar in any home made preparations.

Nuts and oilseeds - All nuts and oilseeds.

Beverages - Coffee, soft drinks and alcohol.

Salt - salt in preparations.

Meat - poultry with skin.



Dietary fibre : Dietary fibre especially soluble fibres reduce triglyceride absorption, increase bile acid out put and decrease LDL and total cholesterol. Eating oat bran or bean diet reduces high blood cholesterol.

Beverages : A high intake of coffee and cola will elevate serum cholesterol levels. Caffeine containing beverage should be restricted since it may aggravate irregular heartbeats.

Salt : Sodium is an essential element and is needed for the body for the various activities. But excess sodium is harmful and increases blood pressure. The major source of sodium in the diet is the common salt. Some foodstuff and processed foods also contain sodium.

Antioxidants : Antioxidant prevent oxidised LDL to attract monocytes and to the further formation of artherosclerotic plaques. Dietary intake of antioxidants including flavanoids naturally present in vegetables and fruits and vitamin E is associated with a decline in coronary heart disease.

Drinking water : calcium and magnesium or other trace elements in hard water may be beneficial to lower cholesterol and triglyceride levels

Exercise physical exercise should be gradually increased. The exercise should be started gradually to suit an individual. Walking is a best exercise.

Cholesterol : The cholesterol intake should be restricted to 300 mg/ day. Foods rich in cholesterol example butter, egg, meat, organ meat and shell fish should be avoided or restricted.

Food items that are to be avoided in coronary heart disease

Cereals - Cakes, pastries, naan, roomali roti and fast foods.

Vegetables - Fried vegetables, potato and banana chips, canned vegetables.

Dairy products - Cheese, butter, khoa, cream and condensed milk.

Egg - Egg yolk.

Fats and oils - Oily dishes, fried foods, ghee, coconut oil and hydrogenated oils.

Sugar products - Sweets, chocolates and icecreams.

Salt - Pickles, papads, sauces, salt biscuits, baking powder and fried crispies.

Non vegetarian foods - all organ meat, red meat, crabs, oyster and prawns.

Dietary Department

Food That Helps !
Garlic

Garlic is in the special food for discussion in this issue we celebrate the unique flavor of garlic. It is guaranteed to transform any meal into a bold, aromatic and healthy culinary experience. Garlic is an indispensable addition to almost all cuisines throughout the world. Not only does it add bold and interesting flavor to your favorite savory recipe, it also provides a wealth of health-promoting benefits, such as reducing the risk of heart disease, lowering cholesterol levels and balancing blood sugar levels. So include a little garlic in your meal as a great way to add extra flavor and nutrition to your Healthiest Way of Eating!

Nutritional Value

One ounce of garlic (about 3 medium cloves) provides 24% of the daily value (DV) for manganese, 18% DV for vitamin B6, 15% DV for vitamin C. Garlic's special sulfur compounds also provide powerful antioxidant protection against free radical damage to cellular structures, including DNA.

More on the health benefits of garlic ...

Health Benefits of GARLIC

Both the leaves and the roots of Garlic have been the subject of fascinating health studies. The combination of traditional nutrients, phytonutrients (particularly *anthocyans*), plus fiber in this food seems particularly effective in preventing digestive tract cancers. Several research studies on chard focus specifically on colon cancer, where the incidence of precancerous lesions in animals has been found to be significantly reduced following dietary intake of Swiss chard extracts or fibers. Preliminary animal research also suggests that Swiss chard may confer a protective effect on the kidneys of those with diabetes through reducing serum urea and creatinine levels.

If vegetables got grades for traditional nutrients alone, garlic would be one of the vegetable valedictorians. The vitamin and mineral profile of this leafy green vegetable contains enough "excellents" to ensure its place at the head of the vegetable Dean's List. The rating system awards garlic with excellent marks for its concentrations of vitamin K, vitamin A, vitamin C, magnesium, manganese, potassium, iron, vitamin E, and dietary fiber. It also emerges as a very good source of copper, calcium, vitamin B2, vitamin B6, protein, phosphorus, vitamin B1, zinc, folate, biotin, niacin and pantothenic acid.

Helping You Bone Up.

Garlic Gets an A+ for its Pro-vitamin A

Promotes Lung Health.

A Healthy Dose of Vitamin C for Antioxidant Protection and Immune Support.

Protect Your Heart with Potassium.

Iron for Energy.

Anti-Inflammatory and Cardiovascular Benefits.

An Excellent Source of Fiber.

Manganese-Energy Production Plus Antioxidant Protection.

Cardiovascular Protection Brought to You By Swiss Chard's Riboflavin and B6.

Vitamin E-rich Leafy Greens Slow Loss of Mental Function.

Thriving With Diabetes

JUST A DROP OF COMMON SENSE

After you are diagnosed with diabetes, you might find yourself learning quite a bit about your diet. Much of this involves making decisions about how best to eat and drink to achieve good outcomes and avoid problems with your therapy. While some rules are fairly obvious and based on solid science, for others, far less evidence is available. One such example is drinking alcohol.

Let's face it : Alcohol is a potent drug that can have a profound, and often negative, impact on users. Still, millions of people in the India drink alcohol on a regular basis, and many of them have diabetes. When I was diagnosed with diabetes 30 years ago, many doctors, including my own physician, believed that people with diabetes should not drink alcohol. The prevailing wisdom was that alcohol could impair your judgment, make it difficult to sense the onset of hypoglycemia, and inhibit self-management. While there wasn't much experimental evidence supporting these assertions, it was the party line of the time.

Today, however, increasing evidence suggests that moderate consumption has many beneficial effects for people with diabetes. In a comprehensive review of several studies on the effect of alcohol use by people with diabetes, the data show that *both not drinking at all and drinking heavily (i.e., more than three drinks per day) have more deleterious effects on health status than does moderate consumption.* Indeed, moderate alcohol intake (i.e., one to three drinks per day) is associated with decreased incidence of coronary heart disease, a major killer of people with type 2 diabetes; improved lipids; and, potentially, reduction of inflammatory response, which is increasingly linked to the risk of cardiovascular disease events.

Limited research also suggests that alcohol is not associated with adverse outcomes when using diabetes tablets. Moderate consumption was found to have no acute effects on blood sugar control in type 2 diabetes. In type 1, it may in fact cause hypoglycemia the following morning, and the usual symptoms of hypoglycemia may be masked and impair the counter-regulatory responses for normalisation.

This suggests that people with type 1 need to consider diet regulation when they drink and make sure they are monitoring their blood glucose.

While moderate consumption of alcohol may have some positive benefits for those who already drink, the science does not support adding alcohol to your diet if you don't currently do so.

But if you have diabetes and you do drink, it's important to discuss this with your health team. Make them aware that drinking alcohol is part of your lifestyle and that you want to continue to do so in a responsible fashion. A dietitian can show you how to enjoy a glass of wine or beer with your meals without adding excessive calories.

Optimal control of diabetes is not only about attaining good Lab report numbers, but achieving a lifestyle that is comfortable and rewarding while you do so. You can, with a little thought, drink a glass of fine wine with your meal and by doing so benefit your health— and your enjoyment of life.

DISADVANTAGES OF OVER COOKING

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Lately lot of attention has been diverted to the harmful effects of various methods of cooking. It was earlier felt that over cooking kills bacteria and makes the food sterile and safe for eating and therefore a lot of people had erred on the side of over cooking rather than under cooking. It certainly helps in killing bacteria but recent research has shown a lot of harmful effects of over cooking.

1. It has been shown that by over cooking or exposing food to high temperature for long periods of time, sugars get converted into Advanced Glycation End products (AGE's) which irritate the cells of the body and release certain triggers of inflammation like C Reactive Protein. These advanced glycation end products are associated with disorders commonly found in adults as they get older like hypertension (High Blood Pressure), diabetes, stroke, dementia, vision problems, skin changes, nervous system and skin disorders. AGE's are produced more with animal derived products, for example cheese, bacon and sausages on exposure to high temperature. If one adds water, specially the use of steaming, it delays this reaction leading to the production of AGE's and is therefore beneficial. Dry high temperature is the worst culprit in this matter.

2. It has been shown that exposure of starch rich food (such as fried potatoes, potato chips, some types of breakfast cereals & baked food) to high temperature leads to production of a substance called "Acrylamide" which is a cancer producing substance and has been associated with some forms of cancer. This fact has been borne out of research carried out in the University of Stockholm. Heating the amino acid "Asparagine" with sugars at temperatures upwards of 120 degree centigrade causes production of Acrylamides. Frying baking, roasting and grilling for long periods are most likely to reach these temperatures and may be harmful. Even use of pasteurised food especially milk may be harmful.

3. Also certain vitamins, specially water soluble Vitamins B, C & E, are dramatically unstable and they get destroyed on exposure to high temperature.

4. Over cooking also reduces the carotene level of the food and therefore Vitamin A, which is very important for proper vision and for development of retina, gets depleted in the food.

5. Repeated exposure to high temperature, specially repeated frying of vegetables, Samosas and Pakoras in the same oil again and again, leads to production of a special form of fat called "Trans Fatty Acids", which are extremely dangerous as they deposit in the wall of the arteries leading to their clogging and blocking. Depending on the area or the organ of the body where these trans fatty acids lodge are the effects noticed. For example if trans fatty acids get deposited in the arteries of the heart, one can get heart attacks ; if in the arteries of the brain, one gets stroke ; in the eyes, it can lead to blindness; in the kidneys to kidney failure and in the legs to pain in the legs on walking (claudication) and some times even to gangrene ending ultimately with amputations. These trans fatty acids are actually the atherogenic i.e. cholesterol depositing form of fat and are very dangerous.

6. Besides that over cooking leads to vegetables loosing their normal lustre so that they become dull and they also loose their delecate flavour and aroma of herbs which are very important for normal salivation and for digestion of food.

With so many disadvantages of over cooking food, it is therefore just appropriate to know what is the best cooking method for good health of the whole family. For a healthy heart, we must eat food prepared by such a cooking method that there is minimum loss of nutrients. There are various methods recommended for cooking :

a. Boiling : The simplest method of cooking is boiling. It is the cooking of food in a rapidly

boiling liquid at a temperature of 100°C. But the main disadvantages being loss of nutrients, colour and flavour.

b. Simmering : When foods are cooked in a pan with a well fitting lid at a temperature just below the boiling point of the liquid in which they are immersed (water – 82°-99°C), the process is known as simmering. Advantage of this method is that loss of nutrients is less.

c. Steaming : To retain the nutritive value of food, steaming is a very good method. Steaming is the process of cooking food in steam from a boiling liquid, usually water. There is less loss of nutrients as there is no leaching and cooking time is less. Colour and flavour of vegetables is retained in this method.

d. Pressure Cooking : In pressure cooking, escaping steam is trapped and kept under pressure so that the temperature of the boiling water and steam can be raised above 100°C and reduce the cooking time. There is loss of flavour and colour.

e. Grilling : Cooking is done under a source of radiant heat. There is less loss of nutrients and improved flavour of food, but one can do over cooking unless one is careful.

f. Roasting : When food is cooked uncovered on heated metal or frying pan the method is known as roasting. There is loss of nutrients like amino acids when the food becomes brown.

g. Sautéing : This method involves cooking in just enough of oil to cover the base of pan (greasing the pan). The heat is transformed to food mainly by conduction.

In general, Frying, Grilling & Microwave cooking for long periods lead to very high temperatures as compared to boiling & steaming. The ideal method of cooking, which is recommended, is a combination of steaming and sautéing.

The advantages which are seen by using these methods are:

a. Nutritive value of food is maintained because there is no leaching and cooking time is less.

b. Easily digestible and not much fat is added.

c. Texture of food is better, light and fluffy.

d. Flavour of sauted and steamed food is good

e. It is ideal for those with poor digestion.

Question :

Are you supposed to weigh more as you reach middle age ?

Answer :

It's not that you're supposed to, but most people do, often gaining about a pound per year in their 20s, 30s, and 40s. People often get less daily physical activity and eat a little more as they get older. If you eat just 100 extra calories a day, you would eat 35,000 extra calories in a year and gain 10 pounds. Unfortunately, your metabolic rate also slows down as you age, so you don't burn those extra calories. The best plan to fight middle-aged spread is to eat healthfully and to get plenty of activity. Good posture and abdominal exercises may help you feel better, but they do not reduce the health risk associated with abdominal fat. Unfortunately, much of middle-aged weight gain is abdominal fat. You may increase your waist size even if your weight does not change. Having more abdominal fat is associated with health risks such as a rise in blood pressure, triglyceride levels, insulin resistance, and diabetes. That's a vicious cycle you can stop by getting back to a younger, healthier weight for you.

It's always better to be Safe than Sorry. Here are a few simple things to be followed when it comes to running, no matter where you are.

Safety outdoors

Surface : A medium hard surface, such as tar or a dirt road, is good as it is firm, yet not totally unforgiving, such as a concrete surface, and does not provide that extra tough workout as on sand. I tend to run a lot on the road and find that, in India, the side of the road often has some mud, which serves as a cushion for the shoes. In a park that has a concrete track, I run a bit off the track too, just to play safe.

Traffic : When you run outdoors, traffic can often be a hazard. Run on the side of the road facing traffic, run preferably in the early mornings when traffic is sparse and exhaust fumes are few and far between. Always give traffic right of way and watch for those crazy overtaking speedsters who don't care about runners. Caution another runner in case you find one is not being mindful of something you think is basic—it could save someone from getting injured.

Dogs : Man's best friend can be a runner's worst nightmare. I have heard stories from friends about how they got chased, even nipped, by dogs while running. When I had bought an electronic pet trainer which would send out some sort of ultra high frequency sound waves to give negative vibes to dogs. I tried it on my first few runs a few years ago in Gurgaon but it did not seem to work. I have run on a few routes with a stick in hand. I have stopped using a stick, but keep two critical things in mind about dogs :

- If I run along a regular route at a known time, there are the same strays and pet dogs I encounter. They know me and don't bark any longer.
- I make sure I do not look scared when I encounter a dog. Steer clear of a bitch with pups—they are normally docile, but you don't want to test their maternal instincts. I carry a water bottle with me and at times, have had to pretend to throw something at them or look suitably armed before they back off.

People : You need to be aware of the people around you in some places. In Chicago, I have been warned that certain areas in Gurgaon are not too safe to run—it has not bothered me, but I would not take my wife and kids with me for a run there. Forewarned is forearmed. Women, in particular, need to be more watchful of stares and lecherous glances. This is not only in India; women have been attacked in parks and other areas in many cities around the world. For this I would say—women should ideally NOT run alone and should try and run in the early morning rather than the later part of the evening.

Evenings : If you must run in the evenings, go to a park, preferably with some friends, and use reflective stripes on your T-shirt or shoes to make sure you are a bit more conspicuous while crossing a road, etc. A stick or baton can help you against dogs and even keep that extra friendly guy at arm's length.

Keeping injury-free

Your gear : Remember, being safe also includes being injury-free and a lot of that has to do with gear—it does not have to be expensive. Check your feet, and buy appropriate shoes for your feet.

The sun : Wear microfibre T-shirts and non-cotton clothes. These help keep you dry, protect your skin from chafing, and also help sweat evaporate and keep you cool. It would be a good idea to carry a cap and sunglasses in case you run in a place where you will encounter some direct sun. A headband helps absorb sweat before it hits your eyes, and keeps them salt free.

WRCS : Warm up or loosen up, run, cool down and stretch. It works !

Schedule : Start gradually, build up and then always step back. Do not increase mileage overall in a week or for the long run in a week by more than 10% of the previous week—a safe thumb rule followed by many.

Listen to your body : Your body is your best doctor. As you run, you become more aware of what each muscle or joint or part of your body is telling you. Push forward or slow down accordingly and do not hesitate to ask other runners or doctors for advice. Stay safe and have fun.

Tips for Really Helping a Person who has Diabetes

By Dr. Vinod K. Gujral, Cardiodiabetologist National Heart Institute

Summertime means family reunions and picnics with loved ones. I've written this column especially for family members and friends of people with diabetes. If you have diabetes and you would like more help and support from someone you are close to, ask that person to read this column. Be sure to point out tips you especially want the person to take to heart.

If you have a loved one who has diabetes here's how you can help. You want the best for family members and friends who have diabetes. You want them to stay healthy, and that means eating right, staying active, taking medication, monitoring blood sugar levels, and a whole lot more. You want to help your loved one do the right thing without nagging. That can be easier said than done, but the tips and list of resources below can make really helping a little easier.

Tip 1 : Learn about diabetes.

Diabetes treatment is improving every day. Understanding diabetes and how it is treated makes it easier to help your loved one. Ask your loved one to explain these things to you. Attend a diabetes education class together. These classes are available at many hospitals. Contact one of the diabetes organizations, like Cardio Diabetes Research Society(CDRS).

Tip 2 : Understand your friend's diabetes.

Everybody is different and everybody's diabetes is different. Some people take insulin, others take tablets, still others take both, and some people take no diabetes medication at all. People manage their diet, activity, and blood sugar monitoring very differently as well. Some people have diabetes complications, while others do not. And some people feel lots of diabetes-related stress while others don't. Asking your loved one about his or her life with diabetes makes it easier to be truly helpful.

Tip 3 : Find out what your loved one really needs.

Try asking the following four questions. Ask your loved one to answer as specifically as possible.

1. What is the hardest thing about living with diabetes ?
2. What do I do that makes it easier for you to manage your diabetes ?
3. What do I do that makes it harder for you to manage your diabetes ?
4. What can I do to help that I am not doing now ?

Tip 4: Offer the help your loved one asks for.

Take to heart your friend's answer to the last question in the tip above. Whether it is running to the drug store when your husband runs out of blood glucose monitoring strips, keeping snack foods out of the house to make healthy eating easier for your wife, or offering your friend some encouragement when she is feeling down, do your best to make your loved one's wish come true.

Tip 5 : Talk about your feelings.

You don't have diabetes, but anyone who is close to a person who does have diabetes is living with diabetes. The closer you are the more diabetes affects your life. How does your loved one's diabetes affect you ? What are your frustrations, fears, and hopes ? Talking about these feelings can help clear the air and put you and your loved one on the same side of the fence. That cuts down on nagging and increases cooperation. And that's a good thing.

Tip 6 : Get help.

There is lots of help available for people with diabetes and those who love them. Contact CDRS for information, answers to frequently asked questions, and tips for making life with diabetes better. Many local hospitals also have diabetes education classes and diabetes support groups. You can also log on to www.diabetesheartcare.com for interaction as well as answers to your questions.

If your family member or friend seems really sad, encourage your loved one to talk to a health care provider about it. Depression is more common in people with diabetes. When people with diabetes are depressed, they not only feel terrible, they usually have more trouble sticking with their diabetes self-care as well. And that means higher blood sugars and more health problems. The good news is this: effective depression treatment — medication or counseling — turns things around, helping people feel better and contributing to lower blood sugar levels. So if your loved one might be depressed, do everything you can to get help.

Tip 7 : Get started

Now it's time to make a commitment. What are you going to do to make your loved one's life with diabetes a little easier ?

Cancer Update from Johns Hopkins

Compiled By : Dr. Shruti Arora

1. Every person has cancer cells in the body. These cancer cells do not show up in the standard tests until they have multiplied to a few billion. When doctors tell cancer patients that there are no more cancer cells in their bodies after treatment, it just means the tests are unable to detect the cancer cells because they have not reached the detectable size.

2. Cancer cells occur between 6 to more than 10 times in a person's lifetime.

3. When the person's immune system is strong the cancer cells will be destroyed and prevented from multiplying and forming tumors.

4. When a person has cancer it indicates the person has multiple nutritional deficiencies. These could be due to genetic, environmental, food and lifestyle factors.

5. To overcome the multiple nutritional deficiencies, changing diet and including supplements will strengthen the immune system.

   Chemotherapy involves poisoning the rapidly-growing cancer cells and also destroys rapidly-growing healthy cells in the bone marrow, gastro-intestinal tract etc, and can cause organ damage, like liver, kidneys, heart, lungs etc

7. Radiation while destroying cancer cells also burns, scars and damages healthy cells, tissues and organs.

8. Initial treatment with chemotherapy and radiation will often reduce tumor size. However prolonged use of chemotherapy and radiation do not result in more tumor destruction.

9. When the body has too much toxic burden from chemotherapy and radiation the immune system is either compromised or destroyed, hence the person can succumb to various kinds of infections and complications.

10. Chemotherapy and radiation can cause cancer cells to mutate and become resistant and difficult to destroy. Surgery can also cause cancer cells to spread to other sites.

11. An effective way to battle cancer is to starve the cancer cells by not feeding it with the foods it needs to multiply. WHAT CANCER CELLS FEED ON :

a. Sugar is a cancer-feeder. By cutting off sugar it cuts off one important food supply to the cancer cells. Sugar substitutes like NutraSweet, Equal, Spoonful, etc are made with Aspartame and it is harmful. A better natural substitute would be Manuka honey or molasses but only in very small amounts. Table salt has a chemical added to make it white in colour. Better alternative is sea salt.

b. Milk causes the body to produce mucus, especially in the gastro-intestinal tract.

Cancer feeds on mucus. By cutting off milk and substituting with unsweetened soy milk, cancer cells are being starved.

c. Cancer cells thrive in an acid environment. A meat based diet is acidic and it is best to eat fish, and a little chicken rather than beef or pork. Meat also contains livestock antibiotics, growth hormones and parasites, which are all harmful, especially to people with cancer.

d. A diet made of 80% fresh vegetables and juice, whole grains, seeds, nuts and a little fruits help put the body into an alkaline environment. About 20% can be from cooked food including beans. Fresh vegetable juices provide live enzymes that are easily absorbed and reach down to cellular levels within 15 minutes t o nourish and enhance growth of healthy cells.

To obtain live enzymes for building healthy cells try and drink fresh vegetable juice (most vegetables including bean sprouts) and eat some raw vegetables 2 or 3 times a day.

Enzymes are destroyed at temperatures of 104 degrees F (40degrees C).

e. Avoid coffee, tea, and chocolate, which have high caffeine. Green tea is a better alternative and has cancer-fighting properties. Water-best to drink purified water, or filtered, to avoid known toxins and heavy metals in tap water. Distilled water is acidic, avoid it.

12. Meat protein is difficult to digest and requires a lot of digestive enzymes. Undigested meat remaining in the intestines become putrefied and leads to more toxic buildup.

13. Cancer cell walls have a tough protein covering. By refraining from or eating less meat it frees more enzymes to attack the protein walls of cancer cells and allows the body's killer cells to destroy the cancer cells.

14. Some supplements build up the immune system (IP6, Flor-ssence, Essiac, anti-oxidants, vitamins, minerals, EFAs etc.) to enable the body's own killer cells to destroy cancer cells. Other supplements like vitamin E are known to cause apoptosis, or programmed cell death, the body's normal method of disposing of damaged, unwanted

15. Cancer is adisease of the mind, body, and spirit. A proactive and positive spirit will help the cancer warrior be a survivor.

    Anger, unforgiveness and bitterness put the body into a stressful and acidic environment. Learn to have a loving and forgiving spirit. Learn to relax and enjoy life.

16. Cancer cells cannot thrive in an oxygenated environment.

    Exercising daily, and deep breathing help to get more oxygen down to the cellular level. Oxygen therapy is another means employed to destroy cancer cells.

Religious Involvement, Spirituality and Practice of Medicine

Dr. Vinod Sharma, National Heart Institute, New Delhi

The words 'religion' & 'spiritualism' in a layman's conception means some basic, age-old cultures and customs which acts as a binding force in a community. Religion is derived from the term "religo" which means "good faith," "ritual," and other similar meanings.

Religion organizes the collective spiritual experiences of a group of people into a system of beliefs and practices. Religiosity refers to the extent and degree of adherence of an individual towards the core value and beliefs of a religion. 'Spirituality' on the other hand means 'breathe'. Spiritual is a much deeper aspect of religion. Spiritualism is more scientific and dynamic and its scope is much wider than religion. Spiritualism is concerned with metaphysical issues like the reason and purpose of life, transcendence from the mundane world, divine justice etc. Though on a holistic approach there may exist fundamental difference between religion and spirituality but spirituality is more or less regarded the same as that of religion because though the path of a formal religion may differ from spirituality, their aim coincide with each other. In other words, religion is the formalized approach to spiritualism. Since time immemorial it has been observed that religious involvements do have a pivotal role in the physical as well as mental well being of human beings. Surveys of general population and that of patients have consistently found that more than 90% of people believe in higher being and that 96% of patients believe spiritual well being is a cardinal factor in health. Despite all these, the spiritual needs of the patients are almost always neglected. But the situation has changed since post cold-war era and now there is a greater acceptance of the role of religion and spiritualism in mitigating diseases. Clinician's interest has increased in patient spirituality because of the growing number of studies that have empirically shown the relation between religious involvement and better health outcomes.

Religious Involvement, Spirituality and Physical Health :

Mortality :

During the past three decades, > 20 studies have shown that religious people have a better and longer life than their counterpart. The population chosen for the study included not only communities but also specific groups. The religious variables used in these studies included activities like membership in religious congregation, attendance at religious services, residing within a religious community and self reported religiosity. A holistic approach has been used to infer the relation between religious activities and better health outcome. A 28 year study of 5286 adults (aged 21 – 65 years) found that frequent attendants (once per week at least) of religious services were 23% less likely to die than the non-attendants. Similarly a nine years study of 22080 American adults found the risk of death for non-attendants to be 1.87 times higher than the frequent attendants. Hence, it can be inferred that a religious person has a higher odds of survival than a less religious person.

Cardiovascular Disease :

Recent studies have found an essential relationship between cardiovascular diseases and religious and spiritual practices. Studies have found that secular Jewish persons has significantly higher chances of myocardial infarction compared to the orthodox Jews. Again a 23 years prospective study of 10,059 male Israeli civil servants and municipal employees found that orthodox Jewish people had a 20% decreased risk of fatal coronary heart disease (CHD) than non-religious men. 12 out of recent 16 studies showed that religious involvement is actually associated with less cardiovascular disorders.

Hypertension :

Studies have found that religious involvement is associated with lower blood pressure and less hypertension. In one of the study, it was found that the relationship between religious activities and blood pressure among 3963 adults (aged 65 years or older) adjusted for age, ethnicity, education, body mass index and previous blood pressure. They found frequent attenders of religious activities (e.g. Prayer) were 40% less likely to have diastolic hypertension > 90 mm Hg compared with infrequent attenders. Finally, 14 out of 16 studies have evidently show that religious involvement decreases risk of hypertension and high blood pressure.

Depression and Anxiety :

Depression is a common illness. 6-10% of the world population suffers from depression. Recent studies have examined the possible relationship between religious involvement and depression. In a study of the treatment of depressed religious persons, standard cognitive behavioural therapy (CBT) was compared with a combination of standard CBT with religious content. With pastoral care alone there had been a significant reduction in post treatment depression compared to reduction in depression by using only CBT. It has also been found that religious psychotherapy has a greater influence in controlling depression than standard therapy alone. Of 29 studies conducted on this relationship, 24 firmly found that religiously involved people do have fewer depressive symptoms and less depression than their counterparts.

Religious involvement has also shown to be associated with less anxiety. Various studies conducted on this issue has amply proved that religious involvement can reduce anxiety irrespective of age, caste, creed, ethnicity, sex and demographic variables. A study examined the relationship between spiritual well-being and anxiety in 114 adults with newly diagnosed with cancer. Patients with spiritual well-being had less anxiety than the non-religious patients. In case of anxiety studies too nearly 70 prospective studies found that religious involvement was associated with less anxiety and fear.

Alcoholism, Cigarette Smoking and other forms of substance abuse :

Religious persons are less likely to abuse alcohol, cigarette or other habit forming substances than non-religious persons. One prospective study of 1014 male medical students found out that religiously involved students were much less likely to abuse alcohol than their non-religious colleagues. On the other hand a number of cross-sectional studies have found an inverse relationship between cigarette smoking and religious involvement. A recent 3 year study on this issue has shown the same result among 4569 adults.

There was strong evidence in favour of the role of religious involvement in reducing abuse of habit forming substances.

Cancer Treatment : Role of Yoga and Prayer :

Medical science has made amazing progress over the years. One of its facets is the rediscovery of the miracle of Yoga. Practiced and advocated over centuries by sages and rishis, Yoga directs and regulates the subtle life force, the very essence of our life. Yogas like sudarshan kriya and pranayama have shown to reduce stress and hence reduce the risk of cancer. Behavioural or psychological factors like chronic stress can aggravate the risk of cancer by the following mechanisms:

- Influence of stress on natural killer (NK) cells.
- Poorer repair of damaged DNA
- Modulation of apoptosis, a process of cell death
- Oxidative stress

Prospective study conducted in a age group between 21-27 for 5 months in a trainee camp in Israel showed that sudarshan kriya and pranayama lowers the blood lactate level. Increase of lactate in blood aggravates stress and anxiety. Sudarshan kriya and pranayama also significantly increased the blood level of glutathione and anti-oxidant enzymes like super oxide dimutase and catalase. In the same study, it was also observed that sudarshan kriya can also increase the number of NK cells and T cells.

Although more clinical studies are needed to document the benefits of programs that combine pranayama (yogic breathing) asanas (yoga postures), and meditation, there is sufficient evidence to consider Sudarshan kirya Yoga to be a beneficial , low-risk, low-cost adjunct to the treatment of stress, anxiety, post-traumatic stress disorder (PTSD), depression, stress related medical illnesses, substance abuse, and rehabilitation of criminal offenders. Yoga techniques enhance well-being, mood, attention, mental focus, and stress tolerance. Proper training by a skilled teacher and a 30-minute practice every day will maximize the benefits. Health care providers play a crucial role in encouraging patients to maintain their yoga practices.

Religious Involvement, Spirituality and Coping :

It's very natural that distressing events like surviving catastrophes and natural calamities, caring for diseased relatives or friends, death of near and dear ones and other such do have a demoralizing effect on the human beings. Being humans, each and everyone

do suffer from such phases of life. Religious involvement in such cases can mitigate the drastic and adverse effect of such experiences. A recent study included 135 relatives and close friends of patients with terminal illness who were followed for up to 14 months after their loved ones death. Those having strong faith in religion and spiritual beliefs were found to come out of their grief and become resolute than those not professing religious beliefs.

Religious and spiritual coping is a more common phenomenon among persons with asthma, HIV diseases, chronic pain, end stage renal disease, multiple sclerosis and cancer.

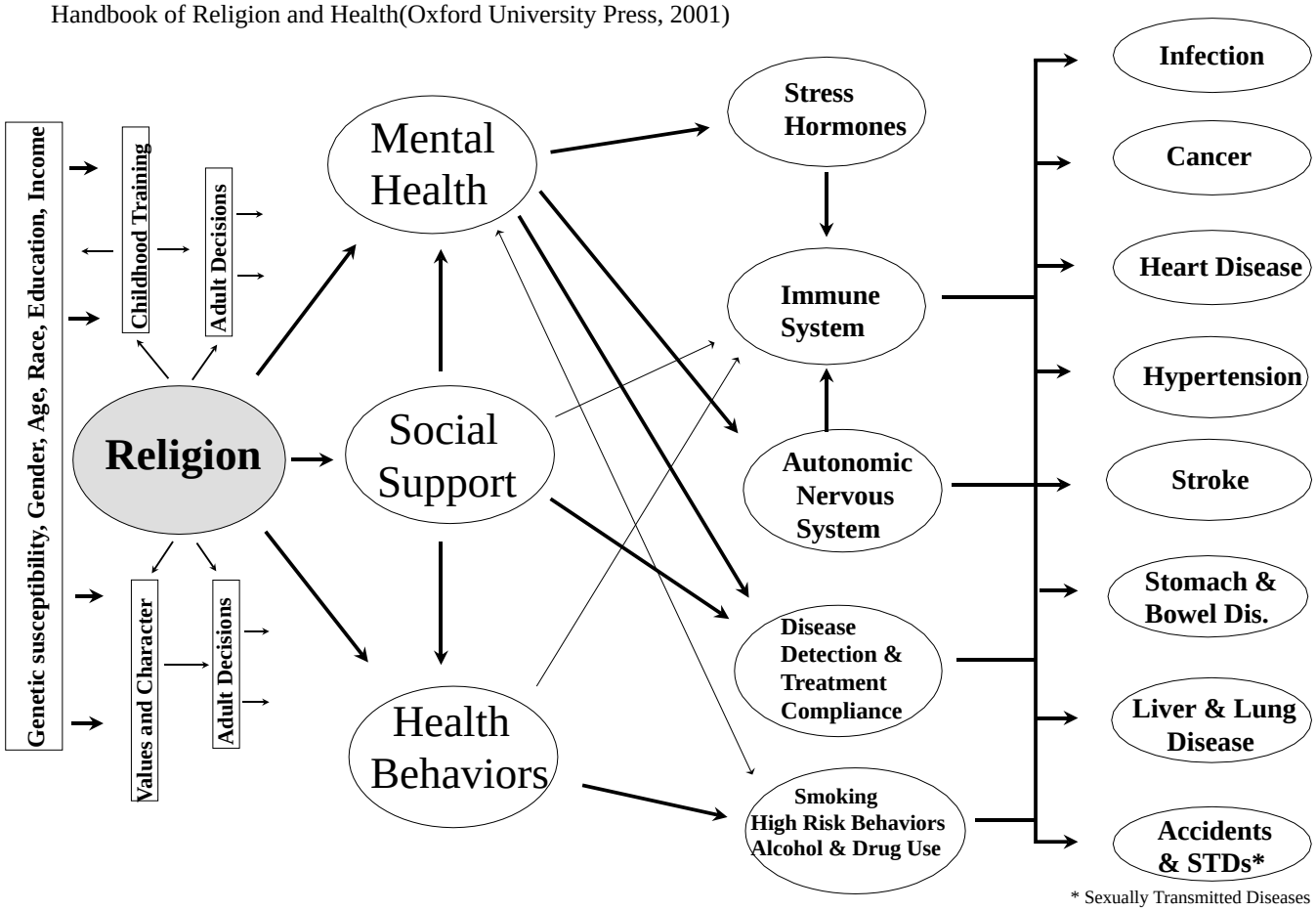
Negative Effects of Religious Involvement and Spirituality :

Unlike the above observations, few systematic population based studies have also related religious involvement with adverse health outcome. Like other factors, religious and spiritual involvement may cause degradation in health related factors. Religious involvement can adversely affect ones physical health by encouraging practices like avoidance of traditional treatment, failure to seek timely medical care etc. It may also affect the mental well being. For e.g. mentally ill religious persons may avoid psychiatric care. Again some unhealthy beliefs that integrate into the core religion with the passage of time may also have a negative impact on an individual.

Possible beneficial Mediators of Religious Involvement and Spirituality :

Model of Religion's Effects on Health

Handbook of Religion and Health(Oxford University Press, 2001)



* Sexually Transmitted Diseases

Like other factors e.g. Exercise, religious involvement and spirituality too enhance resistance to disease through interaction of multiple mediators. Members of a religious community may have a shared genetic ancestry that promotes health. Developmental factors may also mediate the effect of religious involvement on health. For e.g. Children belonging to religious families not only learn healthy behaviours but also view them as a source of hope and comfort during hostile periods. Religiously involved persons can tackle the burden of a stressful life in a more efficient manner. Hence they have a better mental stability than the non-religious persons. Good mental health ultimately leads to a better physical health. Religious persons often embraces the health promoting behaviours like eating proper diet, abstaining from abusive and habit forming substances etc.

Religious practices can engender positive emotions like love, hope, compassion, gratitude etc. and can retard harboring of negative thoughts like suicide, hostility etc. Such positive emotions can limit the activation of sympathetic branch of Autonomic Nervous System and decreased release of stress hormones like adrenaline and nor-adrenaline. Infact, religious involvements do have a say on immune function. Such activities alleviate the immunity of a person. Finally religious involvement also accounts for the placebo effect in an individual.

Clinical implications of patient's religious involvement and spirituality :

Practical aspects :

The results of the surveys and the studies reviewed that patient care can be done more efficiently by acknowledging patient's spiritual belief. US Joint Commission on the accreditation of Healthcare Organization recommends and requires the routine assessment of patient's spiritual needs. Though most clinicians do not initiate any spiritual discussion along with the patient, there is an immense requirement of religious discourse of the practitioner with the patient. The reasons may be cited as follows:

a) Patients regard their spiritual health equally important as that of their physical health.

b) Research suggests that religious involvement is a cardinal factor in improving the health of the patient.

c) Religious notions give rise to positive emotions like hope, love, transcendence etc., which can help in mitigating the disease.

d) Patients suffering from religious, spiritual and existential concerns may not inform their clinicians about them.

In a nut-shell, supporting a patient's spiritual beliefs recognizes the person as a whole and should be viewed in the same light as accounting for other factors that may influence the health of an individual.

Nevertheless, a number of hindrances prevent proper spiritual discourse between the patient and the practitioner. First of all, the clinicians practice in the biomedical model where religious variables are almost irrelevant. Secondly, a very few physicians describe themselves as spiritual. Third, effect on religion in mitigating disease is seldom taught in medical science. Finally, time constraint and lack of concluding evidences also pose as a barrier.

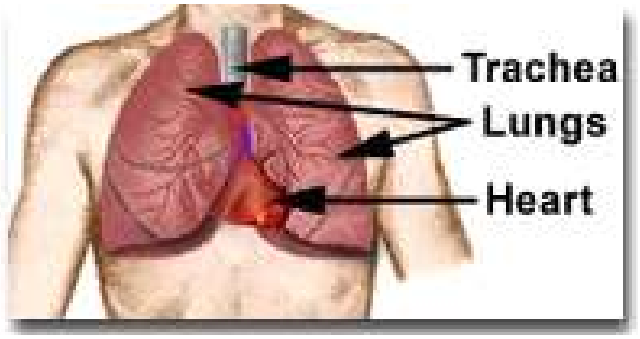
Conclusion :

Acknowledging and supporting the spiritual needs of a patient can be done by following a straight, broad and holistic approach. Spiritual history and open ended question sessions by clinicians can increase the patient-practitioner rapport which may help in the cause of curing the patient. The patient must be allowed to freely discuss his biological, psychological and spiritual concerns with the physician. Special spiritual care-takers like chaplains who are committed to pastoral care must be integrated in the medical system in a judicious manner. On the other hand, the clinicians should also understand that no bird can fly on only one of its wings. They should both heartily acknowledge the biomedical model as well as the religious involvement in the attainment of a sound physical, mental and social well being of a person. Such a coherent system will certainly boost the standard of the present medical scenario by leaps and bounds.

HOW THE HEART WORKS

By Dr. L.C. Gupta, NHI

The heart is responsible for circulating blood throughout the body. It is about the size of your clenched fist and sits in the chest cavity between your two lungs. Its walls are made up of muscle that can squeeze or pump blood out every time the heart "beats" or contracts. Fresh, oxygen-rich air is brought into the lungs every time you take a breath. The lungs are responsible for delivering oxygen to the blood, and the heart circulates the blood through the lungs and out to the different parts of the body.

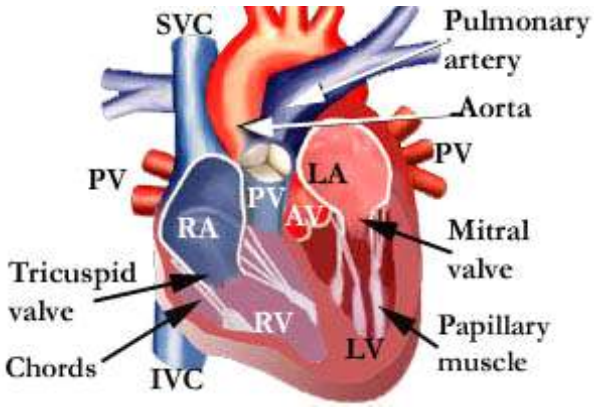


The heart is divided into four chambers or "rooms". You can compare it to a duplex apartment that is made up of a right and a left unit, separated from each other by a partition wall known as a septum (pronounced SEP-tum).

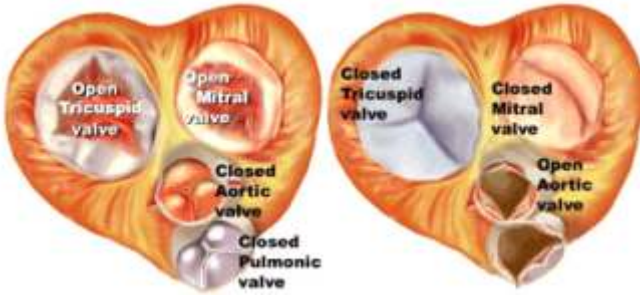
Each "duplex" is subdivided into an upper and a lower chamber. The upper chamber is known as the atrium (pronounced AY-tree-yum) while the lower chamber is referred to as the ventricle (pronounced VEN-trickle). The right atrium (RA) sits on top of the right ventricle (RV) on the right side of the heart while the left atrium (LA) sits atop the left ventricle (LV) on the left side.

The right side of the heart (RA and RV) is responsible for pumping blood to the lungs, where the blood cells pick up fresh oxygen. This oxygenated blood is then returned to the left side of the heart (LA and LV). From here the oxygenated blood is pumped out to the rest of the body supplying the fuel that the body cells need to function. The cells of the body remove oxygen from the blood, and the oxygen-poor blood is returned to the RA, where the journey began. This round trip is known as the circulation of blood.

Do you wonder why each side of the heart has two pumping chambers (atrium and ventricle)? Why not just have a ventricle to receive blood and then pump it straight out? The reason is that the atrium serves as a "booster pump" that increases the filling of the ventricle. Filling a normal ventricle to capacity translates to more vigorous contraction or emptying. You can compare this to a strong spring. Within reasonable limits, the more you stretch a spring, the more vigorously will be its contraction or recoil. More complete filling of the ventricles thus translates into more vigorous ventricular contraction (a good thing).



The figure shown above is a section of the heart, as viewed from the front. It demonstrates the four



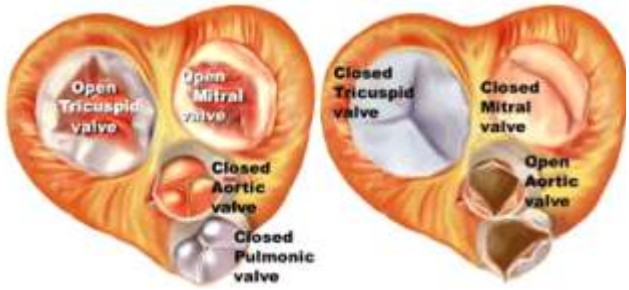
(pronounced PAP-pill-larry). The papillary muscles keep the valve leaflets from flopping back into the atrium. The chords are designed to control the movement of the valve leaflets similar to ropes attached to the sail of a boat. Like ropes, they allow the sail to bulge outwards in the direction of the wind but prevents them from helplessly flapping in the breeze. In other words, they allow the valve to open and shut in a given direction but not beyond a certain point.

Lets now follow the circulation of blood more closely. Oxygen-poor blood from the head, neck and arms returns to the right atrium (RA) via the superior vena cava (pronounced VEE-nah CAVE-ah) or SVC. On the other hand, oxygen-poor blood from the lower portion of the body returns to the RA via the inferior vena cava or IVC.

When the RA is full, it contracts. This builds up pressure and pushes the tricuspid valve open. Blood now rushes from the RA into the right ventricle (RV). When the RV is filled, the walls of the ventricle begin to contract and the pressure within the RV rises. The increased pressure shuts the tricuspid valve and blood is pumped into the pulmonary artery (pronounced PULL-mun-narey) through the pulmonic valve (pronounced pull-MON-nick). The diagram below once again shows the four heart valves as viewed from the top of the heart, i.e., we are looking down at the two ventricles with the right atrium and left atrium removed.

The pulmonic valve is made up of three cusps or flexible cup-like structures, capable of holding blood. When the pressure in the right ventricle is low (as is the case when the RV is filling with blood) blood starts to move backward from the lungs toward the RV. The three cusps of the pulmonic valve fill with that blood and their sides touch each other, effectively shutting the valve. This prevents blood from leaking from the pulmonary artery into the right ventricle while the RV is filling. When the RV contracts to empty, the pressure within the RV rises above that of the pulmonary artery. This forces open the three cusps of the pulmonic valve and blood rushes through the pulmonary artery towards the lungs, where the red blood cells pick up oxygen

The oxygenated blood from the lungs now returns to the left atrium (LA) via four tubes that are known as pulmonary veins (each draining a separate portion



of the lungs). The pulmonary veins empty into the back portion of the LA. When the LA is completely filled it contracts. The mitral valve then opens, and blood is forced into the left ventricle (LV). When the LV is completely filled, it starts to empty its contents by contacting its walls. This increases pressure within the chamber, shuts the mitral valve and opens the aortic valve (AV, pronounced ey-OR-tick). The sequence is similar to that described for the RA, RV and pulmonic valve. The aortic valve also has three cusps.

The mitral and tricuspid valves open and the aortic and pulmonic valves shut while the ventricles fill with blood. In contrast, the mitral and tricuspid valves shut while the aortic and pulmonic valves open during ventricular contraction. This sequence ensures that the ventricles are filled to capacity before the ventricles start to pump blood and that the blood flows in only one direction.

NEWS U CAN USE

20-May-2008, Diabetics' Blood Pressure Often Inadequately Controlled

NEW YORK (Reuters Health) - Uncertainty about a patient's "true" blood pressure (BP) is the chief reason why doctors fail to intensify BP-lowering treatment when a diabetic patient has high BP (hypertension), investigators report.

"Several studies have suggested that 'clinical inertia' — the failure by providers to initiate or intensify therapy n the face of apparent need to do so — is a main contributor to poor control of hypertension," Dr. Eve A. Kerr and colleagues explain in a report in the Annals of Internal Medicine.

To identify factors that underlie "clinical inertia," Kerr at the Veterans Affairs Ann Arbor Healthcare System in Michigan and her team studied 1,169 diabetic patients with hypertension seen by 92 primary care doctors at 9 VA facilities.

Before the study, all the patients were found to have high BP (140/90 mm Hg). Normal BP is anything below 120/80 mm/Hg.

However, despite substantially elevated BP, medication was intensified or close follow-up was scheduled for just 49 percent of the patients.

"Clinical uncertainty" about the true BP value was a prominent reason that providers did not intensify therapy, the investigators found. Specifically, they were less likely to adjust medication if they themselves recorded a BP measurement of less than 140/90 versus a higher reading during the visit, or when patients reported that their BP readings at home were less than 140/90 rather than higher.

"Unfortunately," primary care doctors are not consistent in their approach to gauging "real" BP, and are "possibly placing undue faith in their own repeated measurements or home blood pressure values," the investigators write.

"This ambiguous approach may be a major obstacle to optimizing management of hypertension and improving outcomes for high-risk populations," they conclude.

SOURCE : Annals of Internal Medicine, May 20, 2008.

People who eat a Mediterranean-style diet are less likely to develop new-onset diabetes, new research suggests [1]. Results from this analysis of the Seguimiento Universidad de Navarra (SUN) study — published online May 30, 2008 in BMJ — suggest that the benefits of a Mediterranean diet may be especially pronounced in people who are at higher risk of developing diabetes due to weight, family history, blood pressure, or other factors.

prospective cohort study suggests that substantial protection against diabetes can be obtained with the traditional Mediterranean diet, rich in olive oil, vegetables, fruits, nuts, cereals, legumes, and fish but relatively low in meat and dairy products

While earlier research has established a link between the Mediterranean diet and reduced risk of metabolic syndrome, only one other major study has found that adhering to such a diet may reduce the risk of developing diabetes. And this study, by Mozaffarian et al and previously reported by heart*wire*, looked specifically at survivors of recent acute heart attack. In their study published.

High scores for Mediterranean diet

Among a total of 13,380 former and recent graduates enrolled between 1999 and 2007, 33 developed newonset diabetes over 58,918 person-years of follow-up. When diabetes risk was considered in relation to adherence to Mediterranean diet, assessed by a comprehensive diet questionnaire, people who stuck closely to the diet were least likely to develop diabetes, followed by people who adhered "moderately" to the diet, as compared with people who had the lowest scores, representing low adherence. Strikingly, people with the highest scores for diet adherence were also more likely to have risk factors for diabetes, yet incidence of the disease was no higher in this group, suggesting that the diet might have a substantial potential for prevention.

Hazard ratios for developing diabetes, compared to low adherence to Mediterranean diet (score 0 - 2)

Adherence to Mediterranean diet (score)	Multivariate adjusted hazard ratio	95% CI
Moderate (3 - 6)	0.40	0.18 - 0.90
High (7 - 9)	0.17	0.04 - 0.72

Source

1. Martínez-González M, de la Fuente-Arrillaga, Nunez-Cordoba JM, et al. Adherence to Mediterranean diet and risk of developing diabetes : prospective cohort study. *BMJ*. 2008; DOI: 10.1136/bmj.39561.501007. Available at: http://www.theheart.org/viewDocument.do?document=http%3A%2F%2Fwww.bmj.com

18-Jul-2008, Mom's Diabetes Tied to Early Diabetes in Offspring

NEW YORK (Reuters Health) - Babies who are exposed to mom's diabetes and obesity while in the womb are at increased risk of developing type 2 diabetes in adolescence, according to new research.

To prevent "youth-onset" type 2 diabetes, "we may need to take a life course approach, targeting, in addition to childhood obesity, the increasing number of women with pregnancies complicated by obesity and diabetes," researchers conclude.

Dr. Dana Dabelea at the University of Colorado Denver and co-investigators studied 79 youths who were diagnosed with type 2 diabetes before their 20th birthday and 190 nondiabetic control youths.

They found that far more diabetic youth than nondiabetic youth were exposed to mom's diabetes in the womb (roughly 30 percent versus 6 percent). The same was true for overweight and obesity, with 57 percent of diabetic youth versus 27 percent of nondiabetic youth being exposed to maternal overweight/obesity.

The adjusted odds for type 2 diabetes was roughly 7-fold higher with exposure to maternal diabetes and more than 3-fold higher with exposure to maternal overweight/obesity.

Dabelea and colleagues estimate that 47 percent of youth-onset type 2 diabetes can be attributed to prenatal (before birth) exposure to maternal diabetes and obesity.

Moreover, "the odds for type 2 diabetes was 2.5-fold higher when the diabetes was diagnosed before versus after pregnancy," Dabelea's team reports in the journal Diabetes Care. "This finding suggests that even in the selected group of offspring at high genetic risk, exposure to diabetes in utero is associated with a further increase in type 2 diabetes risk."

The association between offspring diabetes and maternal obesity was attenuated after accounting for childhood BMI, indicating, the researchers say, that maternal obesity increases the probability of childhood obesity, which in turn heightens the risk of diabetes.

Lower Blood Pressure Just a Click Away ?

Is there a better way to manage high blood pressure ? Keeping track of your high blood pressure may be as simple as going online.

A new study shows that web users who chatted with a physician online and checked blood pressure at home controlled hypertension (high blood pressure) better than patients who got traditional care.

Online Help for Hypertension

Researcher Beverly B. Green, MD, of the Group Health Center for Health Studies in Seattle, and colleagues looked at whether hypertension care could be successfully provided over the web without having patients come to a clinic.

The trial included 778 participants aged 25 to 75 who had uncontrolled hypertension and who also had Internet access. Patients received care over a secure web site from June 2005 to December 2007.

Most of those patients (730) completed a one year follow-up visit.

Here are some of the main results :

- The best results were found in the group that had home blood pressure monitoring, web training, and were able to talk to a physician online.
- The group with the highest systolic blood pressure (160 or higher) at the start of the study who got home blood pressure monitoring, web training, and medical care were nearly three and a half times more likely to bring their blood pressure under control than those who got usual care.

Hypertension is one of the leading causes of death worldwide, according to an editorial that accompanied the study. Nearly one in three adults in the developed countries, has high blood pressure.

While medications can help lower blood pressure, study authors write that hypertension remains poorly treated.

The researchers add that patients seem eager to use the Internet to contact doctors, make appointments, refill prescriptions, and get lab results.

The study is published in the June 25 edition of The Journal of the American Medical Association.

SOURCES :

The Journal of the American Medical Association, June 25, 2008; vol 299.

News release, The Journal of the American Medical Association.

MANAGING DIABETES IN ELDERLY

By Dr. V. K. Gujral

Q : Is it common for an older person to get diabetes?

Type 2 diabetes is the most common form of diabetes. Insulin, which is made in the pancreas, helps the body cells in using sugar from the bloodstream. Type 2 diabetes means that the body doesnt't make enough insulin, or doesn't properly utilize the insulin available in the body and consequently high levels of sugar build up in the blood. In our country, about 20 per cent of the elderly population has diabetes and over 25 per cent has impaired glucose tolerance (IGT).

Q : Why don't I have the usual symptoms though I've been diagnosed with diabetes?

In older persons at risk of developing diabetes or who have already developed diabetes, classical symptoms like excessive hunger or thirst, weight loss, frequent urination may be masked. They may exhibit dehydration symptoms like dry mouth and eyes, confusion, urine incontinence or dizziness. Sometimes painful neuropathy, agitation, dementia, anorezia, depression or extreme muscular weakness is present. At times diabetes is detected when patients are hospitalised for some other medical problem.

Q : I've heard diabetic patients are susceptible to hypoglycaemia. What does it mean?

Hypoglycaemia is abnormally low levels of sugar (glucose) in the blood. The target levels of sugar in elderly diabetics should be around 110mg/dL fasting and 150mg/dL two hours after food. A serious complication of diabetes management, symptoms of hypoglycaemia like dizziness, weakness and confusion, result in impaired cognition (unconciousness) and fall leading to injury. Fearing hypoglycaemia, many patients stop oral medication or insulin instead of being aware about its treatment and prevention. When sugar levels fall, one should eat or drink something that has sugar-glucose tablets, candy or fruit juice. At night, patients can keep sugar tablets or juice by their bedside as a precaution. Hypoglycaemia is usually not seen among people without diabetes.

Q : What kind of treatment is required?

Diabetes management needs individualised care including a functional assessment. Treatment involves making lifestyle changes like eating healthy foods, being more active, losing weight if needed, and quitting smoking. Medicines prescribed should be taken regularly. Exercise like walking, gardening and weight training is beneficial not only for impaired diabetes control but also for muscle strengthening, gait balance and overall quality of life.

Sometimes other age-related problems make diabetes management a unique challenge. Impaired physical functioning and cognitive impairment make adjusting to a diabetes care routine difficult. Dietary modification is also limited in elderly patients due to difficulty in changing eating habits, dependence on others for cooking and shopping, decreased appetite and financial concerns.

Q : Could you give some tips for healthy eating ?

No fast, no feast, eat right and exercise. In meal plans, foods one likes should be included as then it is more likely to be followed regularly. A variety of foods should be eaten, including high-fibre choices such as fruits, vegetables and whole grains. Instead of saturated fats like ghee, butter, fatty meats and cheese, one should have good fats like omega-3 fats in fish and vegetable oils. Salt intake should be limited to control blood pressure. Small but frequent meals should be eaten and medicine taken around the same time each day as advised by the doctor.

Q : What are the risks related with diabetes in senior citizens ?

Diabetes related complications involving eyes, heart, kidney and nerves are common. Patients with diabetes are more likely to have heart disease or stroke. Diabetes is the leading cause of severe kidney disease. Many patients have some nerve damage and problems related to gait. People with diabetes are also at risk for cataracts, glaucoma and retina problems, which lead to diminished vision. As high blood sugar makes it more difficult for the body to fight infections, people with diabetes may be at greater risk of many other illnesses.

Dr Ashok Jhingan is a senior consultant diabetological and chairman, Delhi Diabetes Research Centre/NHI

CARDIO DIABETES RESEARCH SOCIETY (CDRS)

(A Voluntary Society for Welfare & Research for Heart & Diabetes Patients)

Registered under societies act 1860 vide No. S 52780

Application Form for the Non Medico Life Membership of CDRS

To, Date.....

The Board of Management
Cardio Diabetes Research Society
Room 023, National Heart Institute
49-50, Community Centre
East of Kailash, New Delhi-110065

I / We / My Company, desire to join CDRS in the Following category

*Non Medico Life Members / *Donor / *Corporate Member Pharma / *Corporate Member Non Pharma.

My / My Company's Particulars are :

1. Name / Age / Gender : .....
2. Company's Name / Business.....
3. Address : Residential.....
   .....
   Phones : .....Fax : .....
   Email : .....
4. Address : Office / Corporate Office .....
   .....
   Phones : .....Fax : .....
   Email : .....
5. Personal Educational Qualifications (with year).....
   .....
6. Personal Occupation : Govt Job /*MNC/PSU Job/*Self Employed (with details).....
   .....
   .....
7. Corporate Company profile.....
   .....
   .....
8. Membership of other Societies (with designation).....
   .....
9. Personal Health / Disease History * DIABETES * Heart Disease * High Blood pressure * High Cholesterol * Brain Stroke * Other Diseases
   .....
10. Area of Interest in CDRS.....
11. I am joining CDRS voluntarily & agree to abide by the rules & regulations of society.

Signatures

FOR OFFICE USE ONLY : Accepted / Rejected / Put on Hold

Life Membership Fee : Rs. 501/- Payable to Cardio Diabetes research society.
Corporate Pharma Membership Fee : Rs. 50,001/-
Corporate Non Pharma Membership Fee : Rs. 30,001/-

Priviledges of Life Members

- FREE Heart, Diabetes, High Blood Pressure, High Cholesterol Consultations lifelong by senior, eminent specialists, at our Sunday free clinics.
- Assured Concession in Services, Purchases of Health care supplies by several organizations.
- 15% concession on All Outdoor Lab, Non Invasive Heart & Diabetes related Tersts at National Heart Institute, New Delhi.
- 10% concession on All Indoor Services except Medicines & Consumables at National Heart Institute, New Delhi.
- 5% concession on out door Medicine Purchases at NHI.
- Choice to participate in community, research, and Social Projects of CDRS, & chance to prove your ability for Public Benefit activities.
- Useful Health Literature available at very low price / free of cost.
- For Corporate Member Organization : 25% concesion on Sponsorship Money during conferences & Camps, with Choice of Stall, Display.
- Periodic Medical Education Lectures / camps / workshop for MNCs, Non Pharma Corporates.
- Special concession for Corporates for Executive Checkup at National Heart Institute, New Delhi.