

HEART BEAT

Issue 26, JUNE 2015

A Quarterly Issue for the Faculty & Staff of Tabba Heart Institute

RENDEZVOUS Page 10
Dr. Junaid Alam Ansari

DIET Page 16
Diabetes, Heart Disease and Ramadan

INSIDER Page 08
CME's Accredited by PM&DC

رمضان كريم



DEPARTMENTAL PROFILE
FINANCE & ACCOUNTS DEPARTMENT Page 03

EVENTS Page 04

From Editor's Desk

Dear Readers,
Assalam o Alaikum

The 26th issue of "Heart Beat" is in your hands... Similar to the previous editions, this issue of coveted Newsletter carries information about events of this quarter, the campaigns, CMEs, Recognition Ceremonies etc. Also the information related to THlkians and the write-ups of general health awareness are incorporated in it.

In the absence of Mr. Fahad Anwer, from the Editorial Board, the team has confronted with the challenge of maintaining consistency and worth of your beloved magazine, yet efforts are made by the entire team of editorial board to produce and present this issue not with same but even better quality.

To add further spirit and value to this newsletter, I would like to welcome Ms. Anila Shahbaz, Ms. Mariam Shaikh and Ms. Safia Aslam to the Editorial Board.

This issue is quite special as comprising of 16 pages, which is a reflection of zealous hard-work of this Editorial Board and obviously a proof of immense appreciation & encouragement from you people.

I am personally thankful and acknowledge each & every individual who has contributed in discussion, research, data sharing, its compilation and finally it's editing & proof-reading to make it a timely success.

Last but not the least, this is Ramadan special edition. We wish you & your family a Blessed Ramadan. May this Holy Month ushers upon you peace, happiness and prosperity.

On behalf of Editorial Board, I hope you would like and rate this issue positively. Don't forget to share your feedback/suggestions with us at

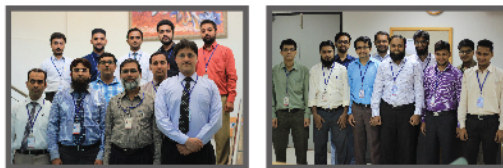
editor@tabbaheart.org

Zeeshan Butt
Editor

Board Members

Safia Aslam
Dr. Shamim Siddiqui
Farzana Amir Hashmi
Anila Shahbaz
Mariam Shaikh
Muhammad Danish Manzoor

Departmental Profile 03



Finance and Accounts Department

Events 04



- THI Continuous Medical Education Series
- Cardiac Health Awareness Sessions
- Life Style Modification Session
- DPA Internship Fair
- Appearance of Consultant Cardiologists of THI on ARY NEWS & ARY Digital
- International Nurses Day Celebrations
- Annual Health Screening at B-Braun
- THI Free Screening Camps
- World Hypertension Day 2015

Insider

- 07 Welcome to THI Family
Moved Ahead
Star Performers
Bereavements
Stork Visits
Wedlocks
- 09 Attitude: A small thing that makes a big difference

Rendezvous

10



Dr. Junaid Alam Ansari

Medical Information 12

- Grapefruit & Drug Interactions
- Challenging Cases in Cardiac Surgery

Diet

- 13 Lemon Water For Weight Reduction
- 14 Watermelon
- 15 Ramadan Meal Plans
- 16 Diabetes, Heart Disease and Ramadan



DEPARTMENTAL PROFILE

Finance & Accounts Department



Since the foundation of Tabba Heart Institute (THI), Finance & Accounts department has been an integral part of THI's endeavors in emerging as a state-of-the-art cardiac hospital. The department functions as a Custodian of all THI assets and hub of institutional financial information.

Finance & Accounts department comprises of a team of professionals having requisite work experience and competency to diligently perform their responsibilities. Finance & Accounts department is divided into four sub-departments:

- General Accounts
- Patient Billing Services Department
- Cash/Treasure Management
- Costing and Budgeting

General Accounts:

Accounts department has implemented standardized and controlled procedures for maintaining and monitoring of accounts, to ensure accurate recording of financial transactions and to limit the exposure to the potential risk of loss to company assets. Further, for efficient completion of all tasks, work responsibilities are clearly segregated among the departmental staff and are regularly monitored by the internal audit department.

Patient Billing Services Department (PBSD):

Patient Billing Services Department (PBSD) equipped with an automated computerized billing system, offers billing services to patients and individual availing the various hospital services. This division further operates in two sub-sections, unit cash counters, and billing department.

Unit cashiers are responsible to register, bill and collect payments from patients availing OPD services, whereas billing officers facilitate the smooth completion of billing cycle starting from registration till the discharge of In-Patients. Patient Business Services focuses on completion of the billing cycle for all admissions and discharges in minimum possible duration to ensure delivery of quality and hassle free billing services to



patients. PBSD also deals with the corporate billing. Currently THI is having more than 50 companies on its panel list.

A recent merger of PBSD with Emergency counter opened a new door of opportunities through which the patient can easily report their complaints and queries. Focusing on patient care, PBSD is providing services 24/7 through ER counters and PBSD counters.

Cash/Treasure Management:

Cash payments made and collected at all counters of THI, including collection points and consultant clinics operating outside the vicinity of THI are centrally collected and controlled by Finance & Accounts department. The department ensures updating of cash on a daily basis for efficient cash management and to facilitate management in monitoring updated position of funds available with the organization.

Costing and Budgeting:

Management conducts a periodical review of activities of Finance & Accounts department and analyzes monthly accounts for the purpose of strategic planning and decision making. Further, Finance & Accounts department facilitates management in strategic planning by providing vertical & horizontal analysis of financial statements, and calculation of the variance of cost & revenues in comparison with budgeted estimates.

The department maintains an up-to-date and proactive medical accounts & billing practice, which helps THI operate at maximum potential and eliminate costly errors that inhibit their ability to provide the best patient care.



EVENTS

By: Marketing Team

THI Continuous Medical Education Series

Tabba Heart Institute continues its CME series in the year 2015. From January to May, four sessions have been organized under the themes as

- Diabetes Management
- Fight Stress & Find Serenity
- Dyslipidemia
- Hypertension

Dr. Zahid Miyan, Ms. Shahida Parveen and Dr. Saif Ul Haq gave updates on Diabetes Management. Dr. Irfan Elahi Chandna gave a talk on Dyslipidemia followed by the group discussion in which Dr. Irfan Elahi Chandna, Dr. Asadullah Bughti and Dr. Waqar Khan participated. Yogi Wajahat was specially invited to give an interactive talk on Fight Stress & Find Serenity. Dr. Irfan Elahi Chandna, Dr. Waqar Khan and Dr. Khursheed Hassan facilitated the CME on Hypertension. GPs from different areas & internal staff of THI attended the sessions.



Cardiac Health Awareness Sessions at PricewaterhouseCoopers (PWC), Airport Security Force (ASF) Headquarter (Karachi), Makro Pakistan (Saddar, Karachi)

Tabba Heart Institute organized three interactive sessions on “Cardiac Health Awareness” for PricewaterhouseCoopers (PWC) staff, ASF (Airport Security Force) staff and then in MAKRO Pakistan, Saddar for their visitors and staff. Dr. Waqar Khan (Consultant Cardiologist of THI) spoke at the occasions about the healthy heart and preventive measures regarding heart diseases.



Life Style Modification Session at Oxford University Press (OUP)

Tabba Heart Institute organized a dynamic Session on “Life Style Modification” at Oxford University Press. Dr. Farzana Amir Hashmi, Head of Preventive Cardiology & Cardiac Rehabilitation Department and Dietitian, Ms. Sidra Naseem talked about cardiac ailments, healthy diet & lifestyle modification during the session.



EVENTS

DPA Internship Fair

Tabba Heart Institute actively participated in Department of Public Administration (DPA) Internship Fair 2015 organized by the University of Karachi at Department of Public Administration. A large number of students showed interest and more than 80 participants have been interviewed for an internship opportunity at THI.



Appearance of Consultant Cardiologists of THI on ARY NEWS & ARY Digital

A proficient team of Tabba Heart Institute, Dr. Waqar Khan-Consultant Cardiologist, Ms. Maryam Sheikh-Dietitian and Mr. Danish Manzoor-Marketing Officer, appeared in Morning Show on ARY News for creating public awareness about blood pressure and its effects.

Dr. Bashir Hanif-Executive Director & Chief of Cardiology of Tabba Heart Institute, appeared in a Morning Show on ARY Digital for an informative heart healthy discussion.



International Nurses Day Celebrations at Tabba Heart Institute (THI)

Throughout the year and particularly in the month of May, THI is proud to celebrate the role nurses play in delivering the highest level of quality care to their patients. **The IND theme for 2015 is Nurses: A Force for Change: Care Effective, Cost Effective.** Department of Nursing Services organized weeklong activity comprising of daily awareness sessions for general public and attendants under the various titles: Chest Pain, Angina, Myocardial infarction (MI), Non-Invasive Diagnostics Procedure, Warfarin Therapy, Basic Life Support (BLS) & Life Style Modification, Door to Balloon-Angiography & Angioplasty-Pre and Post Care, Diabetic Control, Healthy Diet & Routine Exercises and Coronary Artery Bypass Grafting – Pre & Post Care, Infection Control Awareness, Healthy Diet & Routine Exercises.

Undoubtedly, Nurses are the backbone of any hospital. THI celebrated the Nurses week with great zeal, to acknowledge the services and efforts of nurses, to give them an opportunity to express their feelings and observations. The purpose was to highlight the importance of social determinants of health and ensuring that the nurses are a force to change in Healthcare provision. Dr. Bashir Hanif-Executive Director, Mr. Mohammad Altaf-Chief of Nursing, Syed Ilyas Ahmed-Chief Advisor Operations and Mr. Musharaf Hussain-Chief Operating Officer of THI spoke at the occasion and appreciate the management of nursing department for week-long celebrations of Nurses Day. The theme, Care Effective and Cost Effective was well-articulated by awareness sessions, presentations, short plays, songs, poetry and video messages by the nursing staff. Poster competition and quiz competition were also organized by nursing department. Celebrations concluded with the vote of thanks given by Ms. Shahnaz Nadeem-Manager Nursing on the behalf of Department of Nursing Services.



EVENTS

Annual Health Screening at B-Braun

B-Braun collaborated with Tabba Heart Institute for the Annual Health Screening of its employees. Around 50 employees were screened for BP & BMI, Blood Sugar, Lipid Profile, CBC, Creatinine, Vitamin D, Uric Acid, HbA1c, LFT, Hepatitis B & C and ECG. Some of the Employees also donated blood at the end of the activity.



THI Free Screening Camps

Tabba Heart Institute organized free screening camps at North Nazimabad Gymkhana and Tabba Collection Unit, Gulistan-e-Johar. Free Screening of Blood Sugar, Blood Cholesterol, Creatinine, and Hemoglobin were offered to the people of respective vicinity. More than 400 people were successfully screened.

Another free screening camp organized for Airport Security Force (ASF) staff by THI in which free screening of Blood Sugar and Blood Cholesterol was offered. More than 100 ASF staff members were screened.



World Hypertension Day 2015: Activity at ARY Digital Network

Tabba Heart Institute organized an interactive awareness session at ARY Digital Network, Karachi. Dr. Waqar Khan spoke on the occasion about healthy eating, importance of exercise and hazards of smoking & tobacco consumption etc. The lecture was followed by Q/A session. Free assessment for Blood Sugar, Blood Cholesterol, Blood Pressure and BMI was also offered. The event was very well attended and highly appreciated by the management of ARY Digital Network.



INSIDER

WELCOME ONBOARD

Dr. Sajid Hussain	Senior Medical Officer	Cardiology
Dr. Muhammad Salman Ghazni	Senior Medical Officer	Cardiology
Dr. Muhammad Taha Khan	Senior Medical Officer	Cardiology
Dr. Naseer Ahmed	Senior Medical Officer	Cardiology
Eisha Ahsan	Assistant Engineer	Biomedical Engineering
Syed Abul Farhan	Database Administrator	Information & Communication Technology
Dr. Iffat Khanum	Consultant	Infection Control
Maaz Ahsan	Accounts Officer	Finance & Accounts
Kamran Saroor	Assistant Manager	Patient Billing Services Department
Dr. Muhammad Ali	Fellow	Cardiology
Ali Quaid Johar	Medical Technologist	Clinical Laboratory
Dr. Rabiah Masroor	Medical Officer	Cardiothoracic Surgery
Gulnawaz Khan	Medical Technologist	Clinical Laboratory
Dr. Ashok Kumar	Assistant Anesthetist	Cardiac Anesthesia
Faridullah Khiyal Muhammad	Medical Technologist	Clinical Laboratory
Dr. Najia Sabir	Medical Officer	Cardiothoracic Surgery
Dr. Hammad Siddiqui	Medical Officer	Cardiothoracic Surgery
Dr. Ehteshamuddin	Medical Officer	Cardiology
Dr. Saira Abbas	Consultant	Neurologist
Dr. Humayun Irfan	Medical Officer	Cardiology
Muhammad Sabir	Officer	Materials Management Department
Tabish Rasheed	Service Desk Officer	Information & Communication Technology
Dr. Muhammad Faheem	Senior Medical Officer	Emergency Room
Muhammad Atif	Medical Technologist	Clinical Laboratory
Dr. Dileep Kumar	Senior Medical Officer	Emergency Room
Safia Aslam	Officer	Marketing & Public Relations
Dr. Rabbia Khan	Medical Officer	Cardiology
Muhammad Sajid	Manager	Materials Management Department
Dr. Faizan Siddiqui	Medical Officer	Cardiology
Dr. Arif Khan	Senior Medical Officer	Emergency Room

MOVED AHEAD

Dr. Erum Shaheen	Fellow	Cardiology
Syed Zeeshan	Pharmacist	Pharmacy
Dr. Hassan Khan	Fellow	Cardiology
Dr. M. Tahseen Raza	Fellow	Cardiology
Dr. Madiha Baliguddin	Fellow	Cardiology
Sehrish Khakwani	Pharmacist	Pharmacy
Saleem Sulehri	Manager	Safety & Security
Dr. Ayub Motan	Assistant Anesthetist	Cardiac Anesthesia

WEDLOCKS



- Mr. Farhan Aleem
- Ms. Roma Gill
- Ms. Sumaira Fatima
- Ms. Sumaira Ilyas
- Mr. Tanveer Ali
- Ms. Reema Syed

BEREAVEMENTS

We share the grief of

- Dr. Zulfiqar Ali Khan who lost his mother
- Dr. Saira Abbas who lost her father
- Mr. Nadeem Gill who lost his mother
- Mr. Mansoor Mukhtar who lost his mother
- Mr. Junaid Kabla who lost his new born son
- Mr. Muhammad Yunus who lost his mother
- Mr. Anzar Ahmed who lost his father
- Ms. Shagufta Naheed who lost her brother
- Family of Mr. Tanzeem Abbas on his sad demise

May ALLAH ALMIGHTY rest the departed souls in peace and give patience to their families to bear the irreparable loss.



Continuing Professional Development (CPD) is a key for doctors to meet the professional standards and is a source of information required for their revalidation/recertification. Continuing Medical Education (CME) is an essence of this concept. As per latest standards & guidelines of PM&DC, License to practice will be given only to those medical practitioners/specialists who have completed the minimum credit hours from the training conducted by a recognized/professional body.

For the purpose of renewal/revalidation of PM&DC License, Certificate of CME of only those institutions shall be entertained which are affiliated/accredited with PM&DC. **Now CMEs conducted by THI are also accredited by PM&DC in collaboration with Dow University of Health Sciences (DUHS).**

STORK VISITS



- Mr. Ali Moazzam got a Baby Boy
- Ms. Mehvish Nazir got a Baby Girl
- Mr. Shah Khalid got a Baby Girl
- Ms. Naseem Nazir got a Baby Girl
- Mr. Muhammad Jibrán got a Baby Boy
- Mr. Sarfaraz Masih got a Baby Boy
- Mr. Anzar Ahmed got a Baby Girl
- Mr. Muhammad Rizwan got a Baby Girl
- Mr. Rashid Masih got a Baby Boy
- Mr. Hafiz Dawood got a Baby Girl
- Mr. Sarfaraz Masih got a Baby Boy
- Mr. Qamar Din got a Baby Boy
- Mr. Muhammad Khalid got a Baby Boy
- Mr. Muhammad Imran got a Baby Boy
- Mr. Abu Turab Hussain got a Baby Boy

STAR PERFORMERS



Mr. Imran Ali
(Senior Registered Nurse)



Mr. Fahad Farooq
(Billing Officer)



Ms. Raees Fatima
(Lady Searcher)

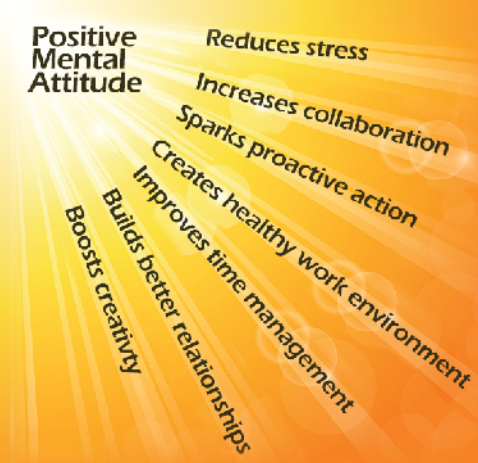


Dr. Taha Khan
(Senior Medical Officer)



Attitude: A small thing that makes a big difference

By: Team HR



In one of my training sessions, I asked the audience, “What one thing will determine your success more than any other?” They answered with words like education, skills, contacts, money, good habits, creativity, and character. Finally someone said attitude. What I consider the most important area of our lives had come as a second thought. I believe that our attitude is the primary force that will determine whether we succeed or fail. History’s greatest achievements have been made by the people who had the right kind of attitude in their life. Attitude is a small thing that makes an incredible difference to your life.

“Attitude” is the very gist of an individual’s way of thinking; it is an individual’s ideals, his concepts of right and wrong, and all his aspirations. Attitude is being good i.e. promoting good thoughts towards the positive side. Attitude is of two basic types. One is positive or pleasant attitude and the second is negative or harsh attitude. In a nutshell, attitude can be defined as the totality of the individual himself. Man is, I’d say, what his attitude is. His thinking, his views, his likes, and dislikes are all enveloped in the single word i.e. ‘attitude’ and your choice of attitude can decide the outcome of your life.

Thus, importance of maintaining a Positive Attitude in life (both in personal & professional) can’t be simply ignored because positive attitude helps to cope more easily with the daily affairs of life. It brings optimism into your life and makes it easier to avoid worry and negative thinking. It is a mental attitude that expects positive results.

When we talk about the workplace scenario, the real challenge is to handle and overcome the obstacles and learn from hard and tough experiences and all these are possible only with positive attitude. A positive attitude in the workplace helps employees to accomplish tasks faster and in a better manner. The performance of employees to a great extent depends on the good relationship they share with their colleagues. A good relationship can be established only when employees demonstrate a positive attitude towards their work and colleagues. Through positive energy, work becomes a pleasure and employees find it easier to achieve their goals. A positive

attitude has significant benefits for an individual in many aspects. Let’s look at some of them below:

1. Career Success: Employees’ success in the workplace is measured through their performance. Employees with a positive attitude will always think of ways to accomplishing their task in a well defined manner instead of complaining or finding excuses for non-performance. This results in success either through promotion or increased compensation.

2. Productivity: With a positive attitude, employees tend to take more interest in what they do and deliver. Consequently, they produce better quality work with minimum errors. This improves their overall output as well as productivity.

3. Leadership: Working in an organization is all about managing a diverse workforce. Some employees earn respect easily and people often follow and listen to them. This is possible through the positive attitude demonstrated by leaders.

4. Team Work: Good relationships among employees help them to build effective teams where all the members are united and work for a common cause. A positive attitude helps employees to appreciate each other’s competencies and work as a team for achieving common objectives instead of being overly perturbed by inadequacies of team members.

5. Decision Making: Having a positive attitude helps employees to take better decisions, in an objective manner. It triggers a healthy thought process, enabling employees to choose wisely and logically.

6. Motivation: Having a positive attitude helps in motivating employees to overcome obstacles that they may face during the course of their job. It also determines the way they see the world around them. The moment they are successful in overcoming obstacles, they are motivated to move forward.

7. Interpersonal Relations: Customers prefer to deal with someone who is positive in nature. A positive attitude enables employees to share a better rapport with customers, earning valuable customer loyalty.

8. Stress Management: Stress has a detrimental effect on the health of employees. So how can employees cope with it? Stress can be reduced through positive thinking, and with reduced stress, employees will enjoy better health and take fewer sick leaves.

In conclusion, a positive attitude at work is beneficial not only to the organization, but also to the employees on an individual basis. There’s a famous saying:

“Nothing can stop the man with the right mental attitude from achieving his goal; nothing on earth can help the man with the wrong mental attitude”

RENDEZVOUS

Dr. Junaid Alam Ansari

Consultant Cardiothoracic Surgeon

“If you are not compassionate, you should not be in this profession”



Qualification & Certification:

- F.R.C.S. (Edin.)
- F.R.C.S (Cardiothoracic)
- M.B.B.S (Agha Khan University)
- Multiple presentations at National and International Forums
- Publication in Index Journals

Why did you choose to specialize in Cardiac Surgery? What inspired you to step into this field?

When I was a medical student in Agha Khan, there came a patient, who was having a heart attack. He continues to have pain for a long time. Finally when pain settled, my consultant asked me: what happened? I told him that the patient completed his infarct. He said: well unfortunately, in the developed world, he would have gone for some life-saving procedure but in part of the world, where we live, we have to accept this. But this is not acceptable for me. One of us will have to go and get trained and develop this service for our people. So I chose to specialize in Cardiac Surgery.

Describe a defining moment in your career that affirmed your decision?

As a cardiac surgeon, there have been many moments in life when you work very hard for the survival of the patient and by the grace of God; you get success, despite all complications. Those are the moments which re-affirmed that what you have done is right. So, I think not just one moment but it's

a continuous process.

Our readers are curious to sneak a peek into a doctor's life. Kindly walk us through a day in your life?

My day starts very early in the Morning. I get ready and arrive at the Hospital at 8:00 a.m. and if being lucky, leave at 8:00 p.m. After getting back to home, I always spend some time with kids. Then do house chores and finally sleep.

Other than that, as a family we are all very active. I have three boys. We go for swimming, golf, cricket, and various indoor and outdoor sports.

What difference does it make when your wife is also a doctor?

Marriage always needs some compromises. When you both are doctors, you need to do more compromises than others. With little efforts, you can make life better and mine is going well, Alhamdulillah.

“The best thing anyone can do is to develop a self alarm. The best alarm can be developed by walking. In routine, you should walk for minimum half an hour and ideally for one hour. While walking, if you don't feel any pain, then you are fine. But once you feel pain and unable to walk, that means something is wrong”

You have been teaching Cardiothoracic Surgery for more than 10 years. To what extent Cardiothoracic Surgery is teachable in your view?

Oh! It is very teachable but requires extensive training. It is a skill and you have to learn it with little more hard work and persistence. It is slower to learn, but that's what cardiac surgery is. It needs efforts and your determination to do it.

Could you please tell us about common heart diseases in Pakistan that require surgical correction?

The most common heart disease is Coronary Artery Disease, in which we deal day in and day out. Next is Valvular Heart Disease because of Rheumatic Heart Diseases. It is common in our region but not in the western part of the world.

What may be the reason that Rheumatic Heart Diseases are common in our region only?

The reason simply is that our system is not developed. When one is growing up, adequate care is not provided. There is not enough nutritional support. We are living in a very crowded region, where germ load is very high.



It is generally believed that the success rate depends on the age of the patient? How far is that true?

You cannot deny that. With each passing day of your life, you get one day older and your reserves get lesser. So there is no doubt about that and it has been proven by many studies that age is one of the strongest factor which you can't change or modify much.

Could you kindly enlighten our readers on the routine checkup one needs to go through before or after surgery?

The best thing anyone can do is to develop a self alarm. The best alarm can be developed by walking. In routine, you should walk for minimum half an hour and ideally for one hour. While walking, if you don't feel any pain, then you are fine. But once you feel pain and unable to walk, that means something is wrong

How should a patient overcome the fear of surgery? What kind of tips would you give to reduce anxiety?

As a Muslim, we believe that life and death are in the hands of Allah. We should remember that all the good and bad time is due to Allah's will. Once we understand and appreciate this, it will become easier to reduce anxiety

Do you believe being Compassionate counts in this profession?

If you are not compassionate, you should not be in this profession.

What is your work philosophy?

Work hard.

Any message for the upcoming professionals in your field?

It is a great field. It feels amazing to give patients relief time and again. If you really like your profession, you will enjoy it. I like it so I am here. Do what you like and like what you do.

RAPID FIRE

Life:
Fun

Childhood:
Enjoyable

Sorrows:
Part of life

Family:
Greatest gift of God

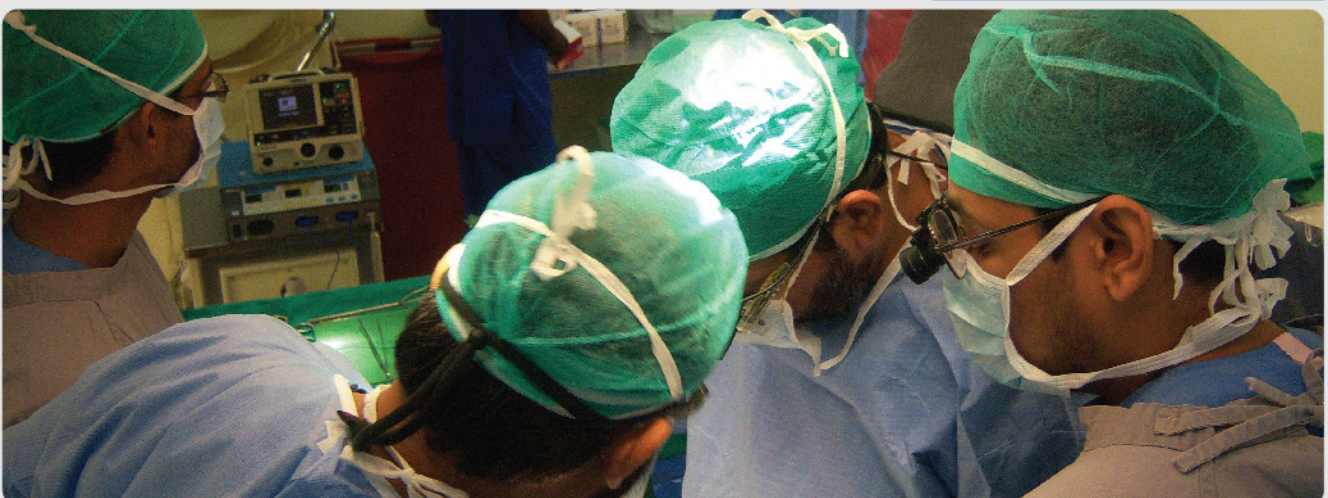
Success:
Given by God

Beauty:
In the eyes of beholder

Wealth:
Thing, you should humble about

Memorable day:
Many

Future:
Very bright



GRAPEFRUIT & DRUG INTERACTIONS

By: Department of Pharmacy

More than 85 medications are known to interact with grapefruit and grapefruit juice, but the average patient is unaware of this potential danger. Did you know that there is an effort underway to develop a hybrid grapefruit with lower levels of furanocoumarins?

Grapefruit Drug-Interaction Risks

Grapefruit is an excellent source of fiber, vitamin C, antioxidants, phytochemicals, and flavonoids. Although the potential for drug interactions involving grapefruit juice has been known for over two decades, a report from Canadian researchers published November 26, 2012 in the Canadian Medical Association Journal has elevated the need for increased awareness of grapefruit drug interactions with more than 85 medications now known to interact with grapefruit juice. The report noted that the number of medications identified as interacting with grapefruit has doubled with potentially fatal interactions increasing from 17 to 43 in the past four years (2008 – 2012).

The researchers noted there are 43 medications which can cause serious side effects. In some cases, even small amounts of grapefruit or grapefruit juice can have the potential to cause sudden death, acute kidney failure, respiratory failure, gastrointestinal bleeding, and other serious side effects.

Commonly used medications implicated include certain cholesterol-lowering medications, blood pressure medications, cancer treatments, and antibiotics such as erythromycin. Examples of medications interacting with grapefruit include:

- Cholesterol lower
- Blood thinning agents
- Heart disease medications
- Analgesics
- Dextromethorphan, a commonly used cough suppressant found in many over-the-counter and prescription medications

Recommendations:

- *Patients taking medications known to significantly interact with grapefruit should avoid grapefruit entirely.*
- *Patients should never stop taking medications without first consulting with their physician.*
- *Because all medications in the same therapeutic drug class interact with grapefruit or grapefruit juice, alternative medications may be available for those patients who do not want to stop consuming grapefruit.*
- *If patients consume grapefruit or grapefruit juice, it is important to make sure their physician and pharmacist are aware, especially when beginning any new prescriptions.*

These potentially dangerous grapefruit drug interactions are believed to occur as a result of chemicals known as furanocoumarins, which are also found in other citrus fruits such as limes and Seville oranges, often used in marmalade. Furanocoumarin's are believed to inhibit

an enzyme that normally breaks down and inactivates about half the effects of interacting medications. With these enzymes inhibited, medication concentrations can increase rapidly and lead to potentially toxic effects. For some medications, the effect of even one serving of grapefruit with normal doses of interacting medications can result in drug concentrations which are the equivalent of a person taking multiple doses of the medication.

Significant Increases in Drug Blood Concentrations:

Studies conducted over the past decade have shown increases in the concentration of some medications taken with grapefruit to increase by as much as seven-fold. Blood concentrations of the widely used cholesterol agent simvastatin have been shown to increase by 330% when given with grapefruit. This can lead to rhabdomyolysis with a life-threatening muscle injury and possible kidney failure.

Because the enzymes inhibited by furanocoumarins have to be synthesized for their activity to be restored, the potential for these drug interactions can exist for 48 to 72 hours after the last exposure to grapefruit juice. As a result, medications which interact with grapefruit can't just be separated by a few hours to avoid the potential for these effects.

References

- <http://www.webmd.com/hypertension-high-blood-pressure/guide/grapefruit-juice-and-medication>
- <http://www.nhs.uk/news/2012/11/November/Pages/Prescription-pills-and-grapefruit-a-deadly-mix.aspx>
- <http://www.rxlist.com/zocor-drug/patient-avoid-while-taking.htm>

Challenging Cases in Cardiac Surgery

In August 2012, a 13 years old male patient had undergone Mitral Valve Replacement with Prosthetic valve and Tricuspid valve repair. The patient made an uneventful recovery. After that, we lost contact with him.

In March 2015, he arrived in Emergency in the critical stage of Cardiogenic Shock. Emergency Echo revealed a stuck (Obstructed Valve) due to thrombus. He had unfortunately stopped taking blood thinner (Warfarin) for almost 2 years. He was immediately taken to the OR and he went through emergency Redo Mitral Valve Replacement with Bioprosthesis.

After a surgery, he made an excellent recovery and leave THI in a stable condition.

35 years old admitted through Emergency due to Cardiogenic Shock. The investigation confirmed that severe Mitral Regurgitation required due to a large hole in the valve. He, unfortunately, developed a paravalvular leak and had to be re-operated successfully 5 days after.

He made a stunning recovery and discharged home on the 5th postoperative day. 2 months later he was brought to the emergency because of heart failure. An echo showed that his weak heart had ruptured and he had a large Pseudoaneurysm of LV. This is an extremely rare complication. He underwent a complex 3rd-time redo operation consisting of explanting (removal) the mitral valve, patch repair of Pseudoaneurysm of LV and replacement of Mitral Prosthesis. The patient made a spectacular recovery and was discharged home on 4th post-operative day.

Both the cases were life-threatening (LT) and their recovery would not have been possible without the wonderful help of all supporting departments of THI.

DIET

LEMON WATER FOR WEIGHT REDUCTION

A REALISTIC OR UNREALISTIC HYPE

By: **Tayyaba Fatima** (Dietitian)

As one gets conscious about his/her excessive weight, they try to find solutions for it. In this search, they find different dietary or medicated ways and seem quite confused whether or not these weight reducing pathways are really effective. Using lemon water is one of those many ways that is claimed to be too effective and quick in weight reduction. Is this really so? Or just a myth or marketing? So an answer is yes, lemon water is effective in weight reduction. But how and how much? What other benefits it has? Does using lemon water have any side effects?

• **Lemon Water in Weight Reduction:**

Lemons are high in pectin fiber, which helps fight hunger cravings. Drinking lemon water before a meal will make you eat less hence will control your calorie intake. In addition, if lemon water is replacing a beverage in your diet that is calorie-rich (tea/coffee with added sugars, fruit juices, soda/energy drinks) then it can help you to lose weight.

• **Effect on Metabolism**

Speed of body metabolism is the rate at which your body burns fuel for energy. Body metabolism mainly boosts up by how much you exercise rather than what you eat or drink. Having lemon water has quite less effect on your body's metabolism and alone cannot be effective in weight loss.

• **Nutrients in Lemon Water**

It is a source of vitamin C and some B-complex, and some minerals as magnesium, potassium and phosphorus.

• **Nutrient Absorption**

Lemon water is a source of vitamin C. Taking vitamin C can help people absorb iron from foods, that may be

particularly useful for vegetarians or people who consume less meat and poultry, since vegetarian diets are often low in iron.

• **Detoxifying Agent**

More researches are needed to be carried out to prove more significant detoxifying effect of lemon water but the best way to clean out your system is by drinking plenty of water and getting enough fiber from fruits, vegetables and whole grains to keep your digestive system regular.

• **Bone Healthy**

Lemons are vitamin C rich and vitamin C is needed for normal bone development and for the formation of collagen, the fibrous protein part of bone, cartilage, and other structures.

As lemons are acidic in nature and acid could erode your tooth enamel (outer most layer of teeth). So when drinking lemon water, drink diluted one.

• **Kidney Stones**

Kidney stone prone people can have citrate in their diet to slow the development of new stones and lemon juice is full of natural citrate.

'You can add lemon water in your diet but in moderation.'

How to be used

- Drink 1-2 glasses lemon water each day.
- Squeeze half lemon in 1 glass water of normal temperature to make the drink diluted.
- You can have first drink as your first meal of the day.
- Drinking lemon water half an hour before meal. Do not use synthetic one. Prepare it by yourself using fresh lemon without adding sugar to the drink.



Lemon water alone could not be effective in case of weight reduction. It is a good way to keep yourself hydrated and energize but could not be useful in getting rid of your excess weight.

Other considerations for weight reduction must be followed along with this drink:

- Drink plenty of water (8-10 glasses per day).
- Avoid skipping meal.
- Take smaller bites and fully chew your meal.
- Consume raw fruits and vegetables instead of juices.
- Consume whole-grains instead of refined ones.
- Cut-down sugar and processed food items from your meal.
- Consume low-fat milk and milk-products daily.
- Along with following healthy dietary pattern, increase your physical activity i.e. brisk walk or strenuous exercise for up to 45 minutes, at least 4-5 times a week. (On an average adult who weighs 65 kg and is walking moderately at a pace of 3 miles per hour would expend 214 k. cal).

Disclaimer: Guidelines given in this article may vary person to person on the basis of individual's health condition

References

- Roger L. Sur, MD, director of UC San Diego Comprehensive Kidney Stone Center.
- Krause's food and nutrition USDA Data Base
- Sachar, MD, a gastroenterologist in Los Angeles, Vandana Sheth, RDN, a registered dietitian in southern California and a spokesperson for the Academy of Nutrition and Dietetics

DIET

Watermelon

Quintessential Snack for a Hot Sunny Day!

By: Marium Sheikh (Therapeutic Dietitian)

Is this only Water in Watermelon?

Nevertheless 92% of its water content, Watermelon is considered as a nutrient dense food and every juicy bite does not only refresh you, but provides significant amounts of potassium, vitamin A, B6, and C. Completely ripe form gives you highly bio-available beta-carotene and lycopene. Wouldn't it be interesting for you to know that watermelon contains highly impressive levels of lycopene? Oh yes, alongside tomatoes, watermelon has moved up to the front of the line in recent research studies on high-lycopene foods (4532 µg per 100g of Watermelon).

Lycopene is a carotenoid phytonutrient that's especially important for our cardiovascular health, cancer prevention and an increasing number of scientists now believe that lycopene is important for bone health as well. Oh yes, do not forget that no fruit is a magic spell and the key message is to eat a healthy well-balanced diet.

Should I worry about my belly size?

Nopes, you perhaps not if you're eating in MODERATION. Watermelon is fat-free, very low in sodium and has only 46 calories per cup (152g diced). But, the dilemma is that who cares about the quantity when eating such a thirst-quenching fruit. Mark these words that you won't be able to drop your pant-size if you are eating too much of watermelon because of its natural sugars content.

So, are there any Health Benefits for me?

Watermelon is soaked in various nutrients and thus, provides multiple benefits to your health; let's join to explore details of those benefits.

Kidney Disorders:

1 cup of watermelon provides 170 mg of Potassium which is very helpful in washing your kidneys and removing the toxic depositions from your body. Moreover, watermelon composed of 92% water, thus induces frequent need of urination and helps to clean out your body.

Prevention from Stones Formation:

Watermelon also helps to reduce uric acid concentration in your blood; thereby it reduces the chances of the formation of renal calculi.

Heat Stroke:

Watermelon is no doubt helpful in reducing your body temperature and blood pressure. An abundance of water stimulates to release the excessive liquid in the form of sweat, which keeps you feel cool in hot weather

Diseases of Lifestyle:

A really good amount of potassium and magnesium in watermelon helps you to maintain your blood pressure. The carotenoids acts as remarkable antioxidants and anti-aging agents; keep your heart young, improve cardiac functions and help to prevent age-related diseases.

Cancers:

Watermelons are in the limelight in recent years. It has impressive levels of lycopene; a carotenoid phytonutrient compound that is linked to cancer prevention.

Impotence:

Arginine, present in watermelon, is beneficial in curing erectile dysfunction.



Immunity Booster:

Feeling weak? Boost your immunity with watermelon. It has anti-inflammatory properties which help you to fight against infections.

Muscle Soreness:

Watermelon-loving athletes do not need to worry about their muscle soreness and increasing heart rate.

According to a 2013 study published in the Journal of Agricultural and Food Chemistry drinking watermelon juice before an intense workout helps reduce next-day muscle soreness and heart rate.

Should Watermelon be taken before a meal?

Watermelon contains a large amount of water, which will be over-filling if eaten after meals. Moreover, eating watermelon before meals (empty stomach) is stated to be beneficial in cleaning out toxics from the body (Source: Tib-e-Nabvi).

Can Diabetic patients also eat Watermelon?

Well, diabetic patients can only eat this fruit if their blood sugars levels are well-controlled. Make sure, watermelon is eaten between meals (not with meals) and in moderation i.e. only one cup at one time.

References:

USDA National Nutrient Database for Standard Reference Release 27 Organic Facts
Tib-e-Nabvi by Dr. Khalid Ghaznavi

DIET

RAMADAN MEAL PLANS

By: Ghilmab Mobeen (Dietitian)

SUHOOR / SEHRI

- 1 small cup of oatmeal **OR** bran flakes with 1 cup low-fat milk
- Egg white omelet (1-2 yolks per week) **OR** ½ cup of cooked vegetable / bhujia **OR** 1/3 cup chicken curry (1-2 pieces of meat)
- 1 whole-wheat chapatti **OR** 1 whole-wheat flour paratha (made with 2 tsp oil)
- ¼ cup (2 tbsp) of low-fat yogurt
- ½ cup of tea (light not strong)

IFTAR

- 1-3 dates
- 1 glass of lemon water **OR** 1 glass of low-fat lassi
- 1 mixed fruit cup / fruit chaat
- 1 cup chickpeas with yogurt & multiple vegetables / Chana Chaat

DINNER

SAMPLE 1

- Chicken & vegetable shashlik
- 1 cup Vegetable & egg fried rice
- Fresh fruit

SAMPLE 2

- 1 cup fish / chicken curry
- 1 whole-wheat chapatti
- 1 cup fresh salad drizzled with lemon juice
- Fresh fruit



This is how your suhoor tray should look like



This is how your iftar tray should look like



This is how your Ramadan dinner plate should look like

NOTE: Drink plenty of water till suhoor to rehydrate your body.

BENEFITS OF A HEALTHY, BALANCED DIET IN RAMADAN

CARBOHYDRATES:

Add complex carbohydrates in your meal during Ramadan as they are slowly digested and help release energy slowly during a fast. Complex carbohydrates are rich in fiber and thus provide fullness, while satisfying your hunger. They are also rich in vitamins and minerals. Complex Carbohydrates include all fiber-rich foods as in; whole-wheat flour, whole grains & seeds (mustard seeds, millet / bajra, sesame seeds) barley, oats, suji (semolina), beans, lentils / pulses, basmati rice (NOT POLISHED 'SELA' RICE).

Avoid simple carbohydrates as they constitute mainly of simple sugars. They are rapidly digested and make you go hungry soon. They usually lack vitamins, minerals and fiber. Simple sugars are also called "empty calories" because they have little or no nutritive value. They include foods as; white / refined flour, khajla, pheni, vermicelli, bakery products (cakes, biscuits, rusks), processed foods which include refined flour, sugar and loads of sodium), white sugar & sweets / mithai made with it.

FRUITS:

All fresh fruits can be eaten. But avoid canned & preserved fruits with heavy sugar syrup in them. Avoid juices / carbonated beverages in suhoor / sehri. Adding fresh fruits in suhoor helps you add vitamins & certain minerals in your diet which will make it balanced.

Don't forget to add dates in your Ramadan meals as it provides a burst of energy & also helps in relieving constipation & several intestinal problems.

EGG / MEAT:

Don't forget to include proteins in your Ramadan meals. Eggs are power-packed protein food, so add in sehri meal. Limit red meat. Add chicken or fish in iftar or dinner.

CAFFEINE:

Avoid caffeinated drinks as; tea, coffee, green tea, carbonated beverages especially cola drinks. Caffeine is a diuretic & it

stimulates fast water loss from the body through frequent urination.

FLUIDS:

Drink adequate fluids in suhoor & iftar & until next suhoor to overcome the water losses. Water is the best drink as it may help replace the salts lost during fasting, without overloading your kidneys with excessive salt & sugars from other beverages. It may also reduce overindulgence in iftar.

CALCIUM:

Add calcium in your Ramadan meals. Yogurt is the best food for Ramadan. It contains a balanced amount of Carbohydrates and proteins. It helps to overcome the lost nutrients during fasting along with the provision of feeling of fullness during fasting. Having 2 spoonfuls of yogurt in suhoor may not make you go thirsty soon, but choose a low-fat option.

FOODS TO BE AVOIDED:

- Deep fried foods such as; samosa, pakoras, rolls, khajla pheni etc.
- High sugar / refined sugar foods as; mithai, jalebi etc.
- High fat / oily foods as; fried sandwich, broast etc.
- High salt foods as; frozen nuggets, seekh kebabs, bakery products etc.
- Refined flour products as; pizza rolls, parathas, puris, kachoris, qulcha, naan, khajla, pheni etc.

FOODS TO BE ADDED:

- High fiber foods such as; whole-wheat flour products, barley, oats (dalya) etc.
- Grilled, baked, broiled, sautéed foods (bake samosas instead of deep frying them)
- Whole-wheat chapatti instead of parathas.
- Milk-based desserts / cereal products.
- Chickpeas / chana chaat with yogurt **OR** with the combination of vegetables.
- Vegetable & egg spring rolls made with whole-wheat chapatti (phulka).

ذیابیطس، امراضِ قلب اور رمضان

By: Sidra Naseem
(Dietitian)

"اے ایمان والو! تم پر روزہ فرض کیا گیا ہے جس طرح تم سے پہلے (امتوں کے) لوگوں پر فرض کیا گیا تھا اس توقع پر کہ تم (روزہ کی بدولت رفتہ رفتہ) متقی بن جاؤ (البقرہ: ۱۸۳)"

رمضان المبارک دنیا بھر میں مسلمانوں کے لئے عبادت، عقیدت، سخاوت، ضبط نفس اور شکرانے کا مہینہ ہے۔ روزہ طلوع آفتاب سے غروب آفتاب تک بھوکا، پیاسا رہنے اور بچے جسم کو مزادینے کا نام ہرگز نہیں۔

رمضان المبارک کے صحت بخش فوائد کیا ہیں؟

سائنس اور طبی اصولوں پر تحقیقات کے مطابق رمضان کے روزوں کے دوران وقتی قوت کی بدولت دماغی صلاحیتوں میں غیر معمولی اضافہ ہو جاتا ہے کیونکہ دماغی فعالیت کی بھرپور افزائش ہوتی ہے اور ذہن بہتر کام کرتا ہے۔ مزید یہ کہ دورانِ روزہ آپ کو مختلف بڑی عادتوں سے نجات دہنی ہے جیسے سگریٹ نوشی، بسیار خوری اور مشقی غذا کیم وغیرہ۔ چونکہ روزہ کے اوقات میں ان چیزوں سے آپ دور رہتے ہیں۔ لہذا روزہ مہر کی ان عادتوں سے غیر مانوس ہو جاتے ہیں جو یقیناً ایک مثبت صحت مند تبدیلی ثابت ہوتی ہے۔ علاوہ اس کے، روزہ کے دوران نمایاں کمی کی بدولت آپ کا معدہ صحت بخش انداز میں سکڑ جاتا ہے اور آپ کم کھا کر بھی اپنا پیٹ بھرا بھر محسوس کرتے ہیں۔

کیا ذیابیطس کا مریض روزہ رکھ سکتا ہے؟

دنیا بھر میں تقریباً ہر مسلمان روزہ رکھنے کے لئے پُر جوش ہوتا ہے۔ اکثر اس سوال پر جواب دلخیز بھی ہوتا ہے کہ ذیابیطس کے مریض کو روزہ رکھنا چاہئے یا نہیں۔ اگر آپ ذیابیطس کے مریض ہیں تو قبل از رمضان ایسے مذاکرات میں شرکت کریں، قبل از رمضان اپنا میڈیکل چیک اپ کروائیں اور صحت مند خوراک اور جسمانی کارکردگی پر عمل کریں، بلڈ شوگر کا جائزہ لیتے رہیں اور حسب ضرورت اپنے علاج معالجہ میں ترمیم کرتے رہیں۔

روزہ کے دوران ذیابیطس کے مریض کو کن پیچیدگیوں کا سامنا ہو سکتا ہے؟

ایسے تمام مریض جن کا مرض کنٹرول سے باہر ہے وہ روزہ کے دوران خون میں گلوکوز کی کمی (Hypoglycemia)، خون میں شکر کی زیادتی (Hyperglycemia)، کیٹونی جسموں میں اضافہ (Ketoacidosis) اور شریانوں میں انجماد خون (Thrombosis) کی پیچیدگیوں کا شکار ہو سکتے ہیں۔

ان پیچیدگیوں سے کیسے بچا جا سکتا ہے؟

ان پیچیدگیوں سے بچنے کے لئے ایک صحت بخش خوراک کا پلان لازمی ہے۔

صحت بخش خوراک میں کیا کیا ہونا چاہئے؟

رمضان میں خوراک کی بھی متوازن صحت بخش خوراک سے ہرگز زیادہ مختلف نہ ہو، 50-60 فیصد افراد ایسے ہوتے ہیں جو روزے رکھ کر بھی اپنا وزن برقرار رکھتے ہیں۔ جبکہ 20 سے 25 فیصد کا وزن کم یا زیادہ ہو جاتا ہے، اکثر وزن میں کمی کا تناسب 3 کلوگرام ہوتا ہے۔ افطار اور سحری کے درمیان کم سے کم خوراک کی بدولت کیلوری کی متوازن تقسیم ہوتی ہے اور اس طرح خون میں گلوکوز کا اضافہ نہیں ہوتا۔

- روزہ شروع ہونے سے قبل سحری کے آخری لمحات میں ہلکی خوراک بہت اہم ہوتی ہے، جیسے اناج والی غذا کیم، ولیہ، دال، سوسا اور پھل وغیرہ جو بلڈ شوگر کے اضافے کو روکتی ہیں۔
- مریض مصلحہ اور مرغن غذا کیم جیسے سو سے، پکڑے، اسپرنگ روٹ، بھینجی، پراٹھے، جلیبییاں وغیرہ استعمال نہ کریں۔



- افطار کے بعد جلد ہی رات کا کھانا کھالیں۔
- شکر والی غذا کیم سحری میں استعمال نہ کریں تاکہ آپ خون میں شکر کی زیادتی سے محفوظ رہیں۔
- رات کے کھانے کے بعد ہلکی خوراک کے طور پر ایک گلاس میں دودھ یا پھل کے چھوٹے کی بدولت سحری تک خون میں شکر کی زیادتی سے آپ محفوظ رہتے ہیں۔
- افطار اور سحری کے درمیان پانی زیادہ استعمال کریں تاکہ روزہ کی بدولت لڑ جیت خون میں اضافہ نہ ہو سکے اور انجماد خون پیدا نہ ہو۔
- چائے، کافی اور کولا سٹرب سے پرہیز کریں کیونکہ یہ پیٹھ میں زیادتی کا سبب بن کر ڈی ہائیڈریشن پیدا کر سکتے ہیں۔
- فریائی کی کوئی غذا کیم جگہ بیک کر دیا کرل یا دیگر کوکٹ طریقے سے تیار غذا کیم استعمال کریں، تیل اور چکنائی والی غذا کیم سے اجتناب کریں۔

کتی جسمانی کارکردگی ضروری ہے؟

معمول کے مطابق جسمانی کارکردگی جاری رکھیں۔ افطار سے قبل زیادہ جسمانی کارکردگی، خون میں شکر کی زیادتی کا سبب بن سکتی ہے۔

کیا ذیابیطس کے مریض دورانِ روزہ اپنا بلڈ شوگر لیول مانیٹر کر سکتے ہیں؟

جی ہاں۔ تاکہ خون میں شکر کی زیادتی یا کمی کا پتہ چل سکے۔

ذیابیطس کا مریض تفتی ہار بلڈ گلوکوز کو مانیٹر کرے؟

روزانہ مختلف اوقات میں لیول مانیٹر کر سکتا ہے۔ ٹائپ 1 اور ٹائپ 2 کے مریضوں کے لئے یہ مشکل امر ہے جو انسولین لیتے ہیں۔

ذیابیطس کا مریض کب اپنا روزہ توڑ سکتا ہے؟

روزہ کے ابتدائی گھنٹوں میں جب بلڈ گلوکوز لیول (3.3 mmol/L) (60 mg/dl) یا (3.9 mmol/L) (70 mg/dl) ٹھہرے۔ اگر یہ لیول (16.7 mmol/L) (300 mg/dl) ہو جائے تو فوراً روزہ توڑ دے۔

کیا روزہ دل پر اثر انداز ہوتا ہے؟

جی نہیں، روزے کا دل کے مریضوں کی حالت میں تبدیلی سے بھی کوئی تعلق نہیں ہے اور دل کے مریضوں کی اکثریت بغیر کسی مشکل یا تکلیف کے روزہ رکھ سکتی ہے۔ بعض تحقیقات سے یہ بھی ظاہر ہوا ہے کہ اونچے درجے کی Lipoprotein سے 30 سے 40 فیصد بہتری آتی ہے۔ روزے، دل کے امراض کی سہزی رکھنے والے افراد کے بلڈ پریشر، وزن، BMI اور کر کے ٹاپ میں کمی میں مدد دیتے ہیں۔

ذیابیطس کے مریض مزید معلومات یا تسلی کے لئے اپنے معالج سے لازمی مشورہ کریں۔

References:

- Recommendations for Management of Diabetes during Ramadan Diabetes Care September 2005.
- <http://www.mcb.org.uk>
- <https://uk.lifestyle.yahoo.com>

"Medical disclaimer: Information in this News letter "as is" for general information only. It is not intended, or to be construed, as medical advice, diagnosis and treatment, and is not a substitute for consultations with qualified health professionals who are familiar with a patient's individual medical needs. This information makes no warranties or guarantees of any kind, and expressly disclaims any and all warranties of any kind or nature, whether express, implied, or statutory regarding the patient education information, including but not limited to the accuracy, completeness, correctness, timeliness or usefulness of any information, programs or products".

Tabba Heart Institute
A state-of-the-art Cardiac Hospital
WHERE YOU MEET CARING, FRIENDLY PEOPLE

ST-01, Block # 02, Federal 'B' Area, Karachi-75950
UAN : 111-844-844, Phone: 36811841 - 50 Fax: 36379062

Follow us on : Twitter Facebook

www.tabbaheart.org