

NEWSLETTER



Monthly Diabetes Educator

A forum for diabetes educators, dietitians and other health care professionals with interest in diabetes.

Aims:

To provide, facilitate and promote education for prevention and management of diabetes and its complications.

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Multidisciplinary Approaches of Foot Care in Diabetes

By Prof. Abdul Basit

Pakistan is a developing country with scarce resources. We have a population of 151.5 million with around 2/3rd living in rural areas. The latest National Diabetes Survey 2016 indicates that 26.4% population is diabetic in Pakistan. Our population per doctor is 1,310 and per nurse is 4,636. And there is no trained podiatrist for this huge population.

The first diabetic foot clinic was established in 1996 and we gave the concept of 24 hours phone service and emergency OPDs for foot ulcers. Our own foot care assistant was trained. A patellar hammer, a tuning fork and a monofilament is usually more than enough for a foot clinic in a developing country. Published data suggest that we have diabetic foot ulcers from 4 to 10 percent which means we in Pakistan expect to have 0.27-0.42 million people with foot ulcers.

The management strategy includes metabolic control, antibiotics, podiatry, off-loading devices and surgical management. Metabolic control includes good glycemic control, tight blood pressure control; improve lipid profile, cessation of smoking and anti-platelet therapy. For good infection control, we suggest early introduction of broad-spectrum antibiotics, usually combination

therapy and for longer durations.

Foot care assistant has got a major role in the management of foot ulcers. Debridement to bleed shall be the policy. Very rare use of specialized dressings should be made; otherwise topical available antiseptics should be enough in majority of cases. No topical antibiotic has any role. Custom made off-loading devices are prepared at low cost including modified rocker bottom, bohrer iron and now scotch cast. A surgeon with special interest in diabetic foot ulcer disease is part of the diabetes foot care team and we have coined a concept of a physician being trained in simple surgical management of diabetic foot ulcers. This has up till now proved to be very time effective and cost effective.

By these simple measures, mentioned above, the amputation rate has fallen from 15.4% to 8.6%. The healing rate has gone high 40.4% to 54.6%. In low resource countries, foot ulcer economics has also to be considered. Our data suggest that average direct cost of treating UT grade one ulcer is USD 45.00, more than ten times average health expenditure of a person. Therefore, prevention plans have to be the mainstay of the policy for nationwide campaign for diabetic foot ulcers. Family physicians are being trained to look at these problems at an early stage to maximize to ensure that majority of these ulcers do not proceed up to amputation. Up till now around 400 doctors have been trained in the community. A diabetic

foot care assistant training course has been started which is first of its kind in Pakistan. World Diabetes Foundation has supported a project for National Diabetes and Diabetic Foot Program. The main outcome of this program is establishment of 115 diabetic foot clinics all over Pakistan. For foot ulcer prevention, diabetes educators also play a major role. Diploma in diabetes education has been started and these educators play a major role in prevention of foot ulcers. Ideally prevention strategies for the community should be introduced. In conclusion, we suggest the screening methods should be simple, management strategies should be aggressive and prevention plans definitive.

Obesity in women with type 1 diabetes could cause reproductive problem

Menstrual irregularity was associated with increased body mass index (BMI), high blood pressure, smoking and PCOS in this



NDTV News | March 2019—A study was presented at ENDO 2019; the Endocrine Society's annual meeting in New Orleans, La revealed that obesity may play a role in reproductive problems in women with type 1 diabetes. Earlier studies have shown that type 1 diabetes is associated with menstrual irregularities and lower rates of fertility.

"Women with type 1 diabetes remain at risk of significant reproductive problems despite improvements in current therapies, and this may be partly explained by the high prevalence of obesity in this group," said lead researcher Eleanor Thong, M.B.B.S., Monash Centre for Health Research and Implementation, Clayton, Australia.

The researchers analyzed data from the large community-based Australian Longitudinal Study in Women's Health (ALSWH). A total of 23,752 women aged 18-23 and 34-39 were included in the study.

Of these women, 162 had type 1 diabetes. The researchers found 24 per cent of women with type 1 diabetes were obese compared with 16 percent of those without

diabetes. Another notable finding was that one in four women with type 1 diabetes was current smoker, compared to one in six controls.

Women with PCOS produce higher-than-normal amounts of male-type hormones. This hormone imbalance causes them to skip menstrual periods and makes it harder for them to get pregnant.

Menstrual irregularity was associated with increased body mass index (BMI), high blood pressure, smoking and PCOS in this cohort.

In women with prior pregnancies, those with type 1 diabetes experienced significantly more miscarriages (46 per cent compared with 33 per cent of those without diabetes) and stillbirths (7 per cent versus 1 per cent). There was no difference in pregnancy rates.

"Despite universal healthcare and improved diabetes management, the risk of miscarriages and stillbirths remain elevated in women with type 1 diabetes. Increased BMI may play a role in the development of PCOS, menstrual and reproductive problems. Furthermore, smoking is associated with an increased risk of menstrual disorders and miscarriage in this cohort," said co-author Professor Helena Teede, M.B.B.S. Ph.D., of the Monash Centre for Health Research and Implementation.

"Pre-conception care and counselling in reproductive-aged women with type 1 diabetes, including weight management and smoking cessation, is imperative to minimize complications in pregnancy," she added.

This story has not been edited by NADEP staff; source: NDTV Health News.

Eating 'ultraprocessed' foods accelerates your risk of early death, study says

CNN | March 2019—The quick and easy noshes you love are chipping away at your mortality one nibble at a time, according to new research from France: We face a 14% higher risk of early death with each 10% increase in the amount of ultraprocessed foods we eat.

"Ultraprocessed foods are manufactured industrially from multiple ingredients that usually include additives used for technological and/or cosmetic purposes," wrote the authors of the study, published Monday in the journal JAMA Internal Medicine. "Ultraprocessed foods are mostly consumed in the form of snacks, desserts, or ready-to-eat or -heat meals," and their consumption "has largely increased during

This trend may drive an increase of early deaths due to chronic illnesses, including cancer and cardiovascular disease, they say.

Ultraprocessed foods are gaining ground in our diets

In the United States, 61% of an adult's total diet comes from ultraprocessed foods, in Canada, it is 62%, and in the UK, that proportion is 63%, a recent study found. Yet research also indicates that eating ultraprocessed foods can lead to obesity, high blood pressure and cancer, the study authors say.



To understand the relationship between ultraprocessed foods and the risk of an earlier-than-expected death, the researchers enlisted the help of 44,551 French adults 45 and older for two years. Their average age was 57, and nearly 73% of the participants were women. All provided 24-hour dietary records every six months in addition to completing questionnaires about their health (including body-mass index and other measurements), physical activities and sociodemographics.

The researchers calculated each participant's overall dietary intake and consumption of ultraprocessed foods.

Ultraprocessed foods accounted for more than 14% of the weight of total food consumed and about 29% of total calories, they found. Ultraprocessed food consumption was associated with younger age, lower income, lower educational level, living alone, higher BMI and lower physical activity level.



One serving of fried chicken a day linked to 13% higher risk of death, study finds

Over the study period, 602 participants died. After adjusting for factors such as smoking, the researchers calculated an associated 14% higher risk of early death for each 10% increase in the proportion of

ultraprocessed foods consumed.

Further studies are needed to confirm these results, the authors say. Still, they speculate that the additives, the packaging (chemicals leech into the food during storage) and the processing itself, including high-temperature processing, may be the factors that negatively affect health.



The "findings make sense, given what we know to date about the deleterious effects of food additives on brain function and health, but the effects observed are very small," wrote Molly Bray, chairwoman of the Department of Nutritional Sciences at The University of Texas at Austin, in an email. She was not involved in the research.

Nurgul Fitzgerald, an associate professor in the Department of Nutritional Sciences at Rutgers, The State University of New Jersey, offered "kudos to the authors" for a study that is "strong" in terms of design.

However, "ultraprocessed" is a huge category of foods, and by lumping so many things together, the researchers lost sensitivity in their results and cannot pinpoint what exactly is causing the effect seen in the study, said Fitzgerald, who was not involved in the research.



"Some factors may be more harmful or less harmful than others. It's really too complex," she said, adding that we can't "run with" these results.

Why are people eating more of these processed foods?

"We are living in a fast world, and people are looking for convenient solutions. We are always stretched for time," Fitzgerald said. "People are looking for quick solutions, a quickly made meal."

When selecting food, taste is the No. 1 factor for most consumers, she said, but price and convenience are also important, and with ultraprocessed foods, that convenience factor is "probably top of the list: grab and go, ready to eat."

Fitzgerald recommends that people look not

only at the front of a package when they buy ready-made meals, but also at the back.

"Look at the ingredients list. Do you understand all those ingredients that go into your foods?" she asked. Buy only those products "with the least number of ingredients and with ingredients you understand."

This story has not been edited by NADEP staff; source: CNN News.

How to have a healthy and energetic spiritual journey in Ramadan

Meena Iqbal Farooqi

Worried about the heat and the long hours of fasting? And about having a fulfilling, tasty yet healthy iftar? All you have to do is cook and consume food made from fresh ingredients, cooked in a healthy manner for a nutritious Ramadan meal; also keeping your hydration in check during the non-fasting time. This will keep you nourished while setting a good example for your family and friends.

Simple rule of thumb while selecting what to consume

- Fresh vegetables→contain higher amounts of vitamins and minerals
- Fresh fruits→prepare juices or low caloric light smoothies and serve them in moderation without adding sugar instead of using sugary syrups
- Use low fat milk and other low-fat dairy products
- Avoid using saturated fats like butter and ghee in cooking and substitute them with canola or mustard oil in small amounts
- Try using lean meat, fish and skinless chicken, and prepare them by grilling, broiling, boiling and baking rather than frying

For you to get all the nutrients needed by the body, your meals should contain all the basic food groups (bread and grains, fruits

and vegetables, meat and legumes, milk and dairy products).

Some specific options for spending holy month with energy, vibrance and good health outcomes

Meat and other protein resources

Choose:

- Fish (1 oz)
- Grilled or boiled skinless chicken (1 oz)
- Lean veal or lamb (1 oz)
- Legumes such as beans, lentils (1 cup) and peas (1/2 cup)
- Eggs with yolks(1 med), 3 times per week or daily for healthy individuals. (include eggs in cooked foods)

Avoid:

- Fried chicken
- Fatty meats
- Liver and organ meats
- Processed meat
- Large amounts of prawn, shrimp and shellfish

Milk and dairy products

Choose:

- Skimmed or low fat milk (1 cup)
- Skimmed or low fat yoghurt (1 cup)
- Low fat cheese or cottage cheese (paneer)
- Lassi without sugar 1 cup

Avoid:

- Whole milk
- Ice cream and whipped cream
- Full cream yoghurt
- Full cream cheeses especially yellow cheeses

Fruits and vegetables

Choose:

- All fresh vegetables, boiled, baked, steamed or cooked with a little oil (1 cup)
- Season vegetables with lemon juice or a little oil
- Fresh fruits (in moderation)

Publications

Title: Pakistan and diabetes — a country on the edge

Published in: Diabetes research and clinical practice. 2018 Nov 10.

Authors: Abdul Basit, Asher Fawwad, Kulsoom Baqa

Title: Pre-Ramadan health seeking behavior, fasting trends, eating pattern and sleep cycle in pregnant women at a tertiary care institution of Pakistan

Published in: Pakistan Journal of Medical Sciences 2018 Nov-Dec; 34(6): 1326–1331.

Authors: Shabeen Naz Masood, Saira Saeed, Nusrat Lakho, Yasir Masood, Muhammad Yakooob Ahmedani, A. Samad Shera

Avoid:

Fried vegetables

Juices with added sugar

Bread and grains**Choose:**

- Whole grain flatbread 1 to 1 ½ 6 or 7"
- Plain spaghetti or rice - 1/2 cup (ideally brown without ghee or high fat sauce)
- Baked or boiled potatoes or better if sweet potatoes 1 small (in moderation)

Avoid:

- Pastries that contain large amounts of fat (doughnuts, croissants, Danish pastries)
- Fried rice
- Fried potato chips or French fries
- Deserts

We hope that you have a pleasant and healthy religious / spiritual journey through Ramadan. With a better understanding of your choices this Ramadan, you now hold the key to a nutritious diet.

Just remember, whatever you decide to eat, a balanced food plan and appropriate hydration containing healthy ingredients, cooked right will help you enjoy iftar and suhour while giving you good health and more energy.

Patient Corner

Emotional impact on family members of people with diabetes

Amna Mansoor

Diabetes sometimes have an emotional impact upon families. There are several factors related to diabetes that could lead to anxiety, stress and depression among the family members, specifically those who have a close relationship with people with diabetes. Diabetes itself and then its progression towards diabetic complications can indeed change family's life, eye problems that can lead to blindness; kidney problem can eventually lead to dialysis; high blood pressure can cause stroke, nerve damage and cardiovascular disease. However, without controlling blood glucose level such complications cannot be avoided and is very essential to manage diabetes effectively.

Emotional stress is a common problem, particularly, when the loved ones are not aware of the disease and don't know how to help the person suffering. Therefore, to reduce stress for patients and the family

members, it is essential to provide education to both and make the patient capable of dealing with their condition.

One of the most common emergencies with diabetes is hypoglycemia, when person's blood glucose level drops too lower than usual. In this circumstance, one becomes confused, unconscious or has seizures that can lead to coma or heart attack or even death. In severe conditions patient needs immediate emergency treatment like glucagon injections to normalize the blood glucose level. It is essential to teach the family members for emergency conditions, and how they could save life with comfort and without fear. If a person with low blood sugar level is conscious or able to talk then they should be given some juice or snack with quick absorbing carbohydrates, as, this is the key to increasing blood glucose level fast.

Note for the patient: Diabetes is a complicated disease, and it is indeed difficult to get to know everything about it. To comfort your loved one's mind, involve them in your doctor's visit and let them be aware of what your healthcare provider is suggesting you. This would make them feel that they are a part of this journey with you.

Story of Zain with type1 Diabetes (Part-4)

Erum Ghafoor

Previous Summary: Zain is 12 years old young man who is a football player. He was feeling so weird and sick for many days which is affecting his overall life. One day he collapsed, and the doctor has diagnosed him with type1 diabetes. He was in shocked, and now it's time that he should learn how to take insulin injection by himself.

Part4: I was in mixed feelings. I was sad and surprised at the same time. Honestly, I was unable to accept that now my life is changed. I have to be careful. My diabetes Educator has told me that if you would make a schedule in your life than it is not hard to manage diabetes easily just like we have a schedule of our prayers. She explained since we can't offer Fajir in Zuhur and Asar in Maghib likewise I need to take my meals, my insulin on time. I have to incorporate physical activity in my life which is good as I have learned at school that physical activity is essential to living a healthy life. After observing her few times, I gathered my all courage and started filling

the syringe with insulin. She told me that I need to fill short-acting insulin first which was watery and transparent. Then she said to me after filling I need to draw my intermediate insulin in the syringe which will work all the day to control my sugars between the meals and other times. At last, I successful filled the correct dose as prescribed by my Doctor. Now, it's time to inject that insulin in my tummy. I was bit hesitant, I thought that it would cause a lot of pain, or maybe I will bleed, or it will hurt me a lot, but on other hand I have realized that it's now part of my life as meals and other stuff. My Diabetes Educator was encouraging me continuously and said Zain there will be no pain. You just need to learn that insulin works correctly in fat beneath our skin — the best layer of fats situated at tummy that is the reason that we are starting from the belly.

Otherwise, we can take insulin injection at the thigh, buttock too but the best absorption site is tummy. She also described that we need to slightly pull some folds of tummy and inject. We shouldn't insert the needle in slow motion, as it will cause pain, we need to do it just in a swift. I listened to her instructions carefully, and I inserted the

needle in my tummy. Wow! She was right; there was no pain at all. Then I pushed plunger with my forefinger and insulin went inside. There was no pain at all. A gentle smile came on her face, and she said look, there is no pain at all. You just need to change syringe every second day. When I took out the needle there was no blood. I just recapped it, and it was over.

Continue in Next issue.....

Moral of the part: Taking insulin injection by your self is not a big deal. The pain and fear is only in our mind and we need to overcome on it by learning correct technique from our diabetes care team.

In the Next Issue

- Ramadan and Diabetes Conference
- Different Levels of Physical Activity Tied to Reduced Mortality: results for a study on
- Diabetes and mental health: how to overcome feeling of jealousy and envy

And more...

