

diabetes

POSITIVE LIVING

HEALTHY LIVING WITH DIABETES VOLUME 5 ISSUE 1 JANUARY-FEBRUARY-2014



Type 1 Diabetes

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4th EMIRATES DIABETES & ENDOCRINE CONGRESS

مؤتمر الامارات الرابع لأمراض السكري والغدد الصم

20 - 22 February 2014

Grand Hyatt Conference & Convention Centre, Dubai, UAE

Scientific Topics:

- New Frontiers in the Management of Type 1 Diabetes
- New Therapies for Diabetes
- SGLT2 Inhibitors
- Advances in Incretin based Therapies
- Review of CV Outcome Studies in Diabetes
- New Guidelines for Dyslipidemia
- Hyperparathyroidism
- Advances in the Management of Osteoporosis
- Vitamin D Deficiency
- Diabetes and Pregnancy
- Endocrine Disorders in Pregnancy
- Subclinical Thyroid Dysfunction
- Pituitary Tumors
- Acromegaly Updates
- Medical Management of Cushing's
- Endocrine Hypertension
- Testosterone Replacement Therapy
- Management of Menopause
- Androgen Excess in Women

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- Insulin Pump & Continuous Glucose Monitoring
- Insulin Injection Techniques
- Diabetes Education

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CHANGING LIVES FOR 90 YEARS

defining
moments

As the diabetes pandemic
continues, the world needs
more defining moments



Today, 371 million people have diabetes. By 2030, this could rise to more than 550 million. Across the world a lack of diabetes awareness, unhealthy lifestyles or inadequate access to healthcare mean that millions of people continue to lose their sight, require amputations or die prematurely because of diabetes-related complications.

For 90 years, Novo Nordisk has been defined by moments that have led to fundamental improvements in the lives of people affected by diabetes, haemophilia and other serious chronic conditions. Today, the company has thousands of employees all over the world with the passion, the skills and the commitment to create more defining moments.

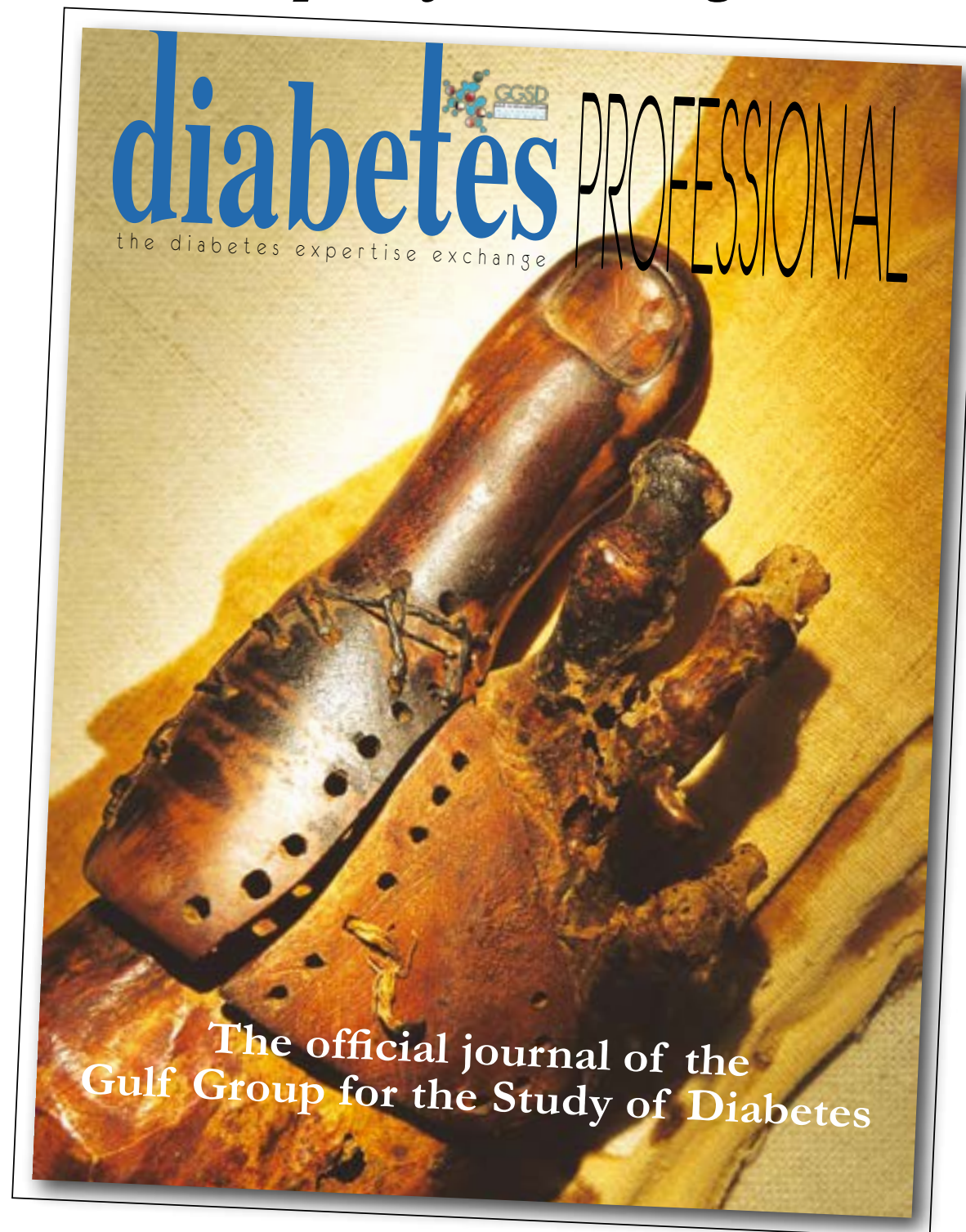
What will your defining moment be?



The Diabetes Expertise Exchange

Launching Soon!

Be part of the Exchange



RENEWING OUR COMMITMENTS

The start of the New Year has also brought with it a new look to *Diabetes Positive Living*. Our topics this year are dynamic as they are relevant, as we bring a fresh, local and regional perspective. We now have a *Diary of a Practitioner* section that will feature contributions from eminent doctors in the field. This issue as we look at type 1 diabetes; we have Dr Asma Deeb, who has been an outspoken educator for type 1, tell us about her encouraging experiences in the UAE. Type 1 is a disease with no prevention and no cure and it is truly heartening to know about the amazing people and work involved with it, in the region.

Also our *Lifeline* section will feature exceptional facilities in the region where you could get the very best attention and treatment for complications related to diabetes. As we look at eye complications in this issue, we feature *Moorfields Eye Hospital, Dubai* one of the premier institutions equipped to address pretty much anything related to the eye. What will be a defining feature in the coming year will be the *Don't believe the type* section and the *Notes on a Motif* section that is keen to address and empower people with diabetes from a societal point of view. We will not shy away from addressing the all-so-vital, yet not-so-talked about issues that people with diabetes have to live with. This issue we look at, what exactly is proper diabetes etiquette.

Finally, let me just point to our *Tryabetes* section which are things you can try with regards to diabetes self-management. This issue introduces Mobile Self-Management. The New Year brings fresh impetus and its first rays new hope, natural for this to lead to an encouraged attitude, and we in turn encourage you to try with *Tryabetes*. And just like a calendar you can shred off your weight and numbers month by month till at the end of the year, you stand healthy, hale and hearty.

The journal outfitting diabetes care-givers in the GCC

From the makers of

diabetes POSITIVE
LIVING

&

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إيجابية

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diabetes

POSITIVE
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FINGER
PRICKING GOOD
Eating on The Fast
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The Low Caloried,
Antioxidant
Blackberry that offers
more than mobile
correspondence

Applesauce Pancakes

Veggie Sausage
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IN ANY WEIGH,
SHAPE OR
FORM

The Jumeirah
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TMG MIDDLE EAST LLC
206, Ahli House-1, Al Nahda 2
PO Box: 233052, Dubai, UAE

TMG MIDDLE EAST MFZ LLC
RAK Media City, RAKIA
PO Box: 36052, Ras Al Khaimah, UAE

TMG KSA
PO Box: 98 , Post code:31932,
Al Khobar, Kingdom of Saudi Arabia

Tel: +971 4 2588 646 Fax: +971 4 2588 647
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DIABETES ETIQUETTE, IS THERE EVEN SOMETHING LIKE IT?

What is proper diabetes etiquette? Is there even something like it? Apparently some people do think so and get quite irate when it is ignored. Diabetes etiquette is not about table settings, keeping your elbows off the table or thank you notes. It is about behaviour that helps everyone become comfortable with diabetes without embarrassing either the person with diabetes or the people interacting with the person.

If you have diabetes:

1. Make your needs known in a polite yet effective way.
2. Be considerate of others when performing diabetes tasks in public, such as insulin injections and blood glucose checks.

3. Be considerate of restaurant staff and those dining with you when you make special food requests.
4. Offer hosts information about your food needs in advance to avoid those moments when someone is entertaining. Most people will be glad to know rather than prepare something you prefer not to eat which would result in discomfort for all.

If you care about someone with diabetes

1. Do Not Nag. The goal should be to try to make it easy for your loved one.
2. If you do not know about or do not understand something, ask.
3. Do not make a big deal about special requirements. Treat your loved one like any other person.

Making it public

Injecting insulin in public can be awkward and uncomfortable for you and for others. Should you do it at meetings or in restaurants? Preparing the syringe can be cumbersome and the sight may not have the best effect on an observer's appetite or stomach. You could leave the table and the conversation, but that would not be fair on you. You should not have to hide your diabetes or be punished for it. What then is the best and most fair way to deal with the situation?

Let's weigh in all the factors. On the one hand the timing of insulin is absolutely important. One should never delay taking insulin to keep an acquaintance happy. After all no one expects an individual taking an aspirin or an asthma inhaler to seek out a private spot. Your insulin needs should be respected as well. On the other hand the restaurant is not the place to begin a heated discussion. Leaving the table however, should not be necessary. Try saying, "This will just take a second." Then turn away and inject into an inconspicuous spot on your leg or in your abdomen that is hidden by the table. You can always speak about diabetes if you wish when the time feels right.

Choosing your injection site

Some locations on the body are better when injecting in public than others. An example is below the knee, on the inside of the leg. Here is how:

1. Cross your right leg over your left.
2. Lift your pant and locate the fatty area found on the left side of your right leg, just below the knee.
3. Inject.

Find a place that you are most comfortable with in public.

Injecting through your clothes

Another way to be discreet is to inject through your clothing. Researchers found that this popular behaviour is not only convenient, but relatively safe as well. If you try this wear dark clothing to prevent small bloodstains from appearing.

Try an Insulin pump

Diabetes care is practically made invisible with an insulin pump. The pump can be worn on a belt, under a shirt, or even inside a bra. It quietly delivers insulin to your body through a flexible, plastic tube.

Making Blood glucose monitoring public

Monitoring blood glucose also has to be done in public occasionally and can make casual observers cringe in horror. Imagine being at a business meeting and feeling a low in blood sugar. You need to check it so you can address it before it gets worse. You pull out and place your glucose monitor on the table. Your colleagues know you have diabetes but



feel a bit
uneasy
about
what
you are
about
to do.
What

should you
say? What would
you do? Ask if they mind if
you test. Forty Nine out of 50 do not
mind. If you act relaxed and nonchalant
as you check your blood sugar, you will
communicate a message of confidence and
comfort to those nearby who are nervous of
how to react. The general public nowadays
are more 'diabetes savvy'.

If you are a person who works with someone
with diabetes and cannot stand the sight of
blood then it is best that you leave the room
for a few moments when the person checking
their blood. Later it may be valuable for you
to gently communicate to the person why
you had to leave. Beginning your dialogue of
discomfort may result in the person giving
you more notice before they check in the
future or even offer to leave the room.

Mind your Language

There are rules for people who
do not have diabetes as
well when it comes
to diabetes
etiquette.

Here are some important ones.

1. It is not your place to remind a
loved one with diabetes how to
eat properly.
2. If your
spouse with
diabetes is
angry, do not
automatically
blame it on his or
her condition.
3. Do not treat
anyone who is newly
diagnosed with
diabetes like they are
fragile or stupid. Neither
is true.
4. Do not blame the person with
diabetes for his or her blood sugar highs
or lows. They can occur for a variety of
reasons beyond control.

What a person with diabetes may want his or her friends to know

1. I want you to know all about diabetes
etiquette without me having to tell you.
2. Please ask me if you do not know what I
should or should not eat or what kinds of
needs I have.
3. I like to be treated like everyone else.
4. I will do my best to practise my
diabetes care in a way that is
comfortable for everyone.

What a loved one/friend may want the person with diabetes to know

1. I may ask you about your
diabetes needs, especially if we
are serving food at an event.
2. Please let me know if I
can do something to make
diabetes easier for you.
3. If I offend you, it is
unintentional. Please let me
know.
4. I like to feel appreciated when I offer to
help.

What Is Diabetes?

Our bodies need fuel to give
them the energy to keep working



International
Diabetes
Federation



world diabetes day
14 November



World Health
Organization



EMIRATES
DIABETES
SOCIETY





sugar Babies Type 1

Type 1 diabetes, formerly known as Juvenile diabetes can actually occur at any age. However, it is most often diagnosed in children, adolescents, or young adults. Type 1 diabetes accounts for about 5 to 10 percent of diabetes cases. About 20 percent of those cases are adults. Dr. Yasser Al-Nuaimi, Director of Ras Al-Khaimah Medical District confirmed reports which stated that 12 per cent of the GCC region's healthcare budget is spent on Type 1 Diabetes.

Insulin is a hormone produced by special cells, called beta cells, in the pancreas. The pancreas is found behind your stomach. Insulin is needed to move blood sugar (glucose) into cells, where it is stored and later used for energy. In type 1 diabetes, beta cells produce little or no insulin. Without enough insulin, glucose builds up in the bloodstream instead of going into the cells. The body is unable to use this glucose for energy. This leads to the symptoms of

type 1 diabetes. The exact cause of type 1 diabetes is unknown. Most likely it is an autoimmune disorder. An infection or some other trigger causes the body to mistakenly attack the cells in the pancreas that make insulin. This kind of disorder can be passed down through families.

Because type 1 diabetes can start suddenly and with severe symptoms, people who have just been diagnosed may need to stay in hospital until good



control over blood sugar is reached. This is followed by frequent check-ups with your healthcare provider. As the disease gets more stable, you will have fewer follow-up visits. Visiting your health care provider is very important so you can monitor any long-term problems from diabetes.

INSULIN

Insulin lowers blood sugar by allowing it to leave the bloodstream and enter cells. Everyone with type 1 diabetes must take insulin every day. Insulin is usually injected under the skin. In some cases, a pump delivers the insulin all the time. Insulin does not come in pill form.



Insulin Is Not a Cure

While insulin injections or infusion allow a person with T1D to stay alive, they do not cure the disease, but it helps in controlling blood sugar and hence reducing and delaying the serious complications like kidney failure, blindness, nerve damage, heart attack, stroke, and pregnancy complications.

EATING AND EXERCISE

People with type 1 diabetes should eat at about the same times each day and try to eat the same kinds of foods. This helps to prevent blood sugar from becoming too high or low. Regular exercise helps control the amount of sugar in the blood. It also helps burn extra calories and fat to reach a healthy weight.

Ask your health care provider before starting any exercise program. People with type 1 diabetes must take special steps before, during, and after intense physical activity or exercise.





driven large-scale agro-food production systems have altered the types of food available, their prices, and the ways and locations in which they are marketed and sold. But it isn't just the food. Fuelled by rapid urbanization, nutrition transition, and increasingly sedentary lifestyles,

Globalization—the inexorable spread of knowledge, technology, culture, and capital from country to country —has been a force both for good and ill, and this is most

diabetes has grown in parallel with the worldwide rise in obesity. And it does not stop there either. ‘Globesity’ as some call it is no longer restricted to developed economies,

delta. In doing so it has super-charged the ‘Nutrition Transition’ – a term that refers to the obesity-inducing shift from traditional diets to Western diets that accompany modernisation, wealth and a fast-paced society. The diets that contain a larger proportion of sugary, salty, fatty and refined foods which also tend to be energy-dense and low in micronutrients are the specific food demands of populations spending more money on food and less time in its preparation. This is a direct result of agrarian economies moving towards industrialisation, expanding middle classes, rising incomes, and rapid urbanisation.

The combined consequences of these nutrition and lifestyle transitions are a growing pervasiveness of chronic diseases in developing country populations: one such disease is Type 2 Diabetes Mellitus (T2DM). The T2DM burden has grown parallel to the global rise in chronic disease risk factors - overweight and obesity, sedentary lifestyles, and increased tobacco and alcohol consumption.

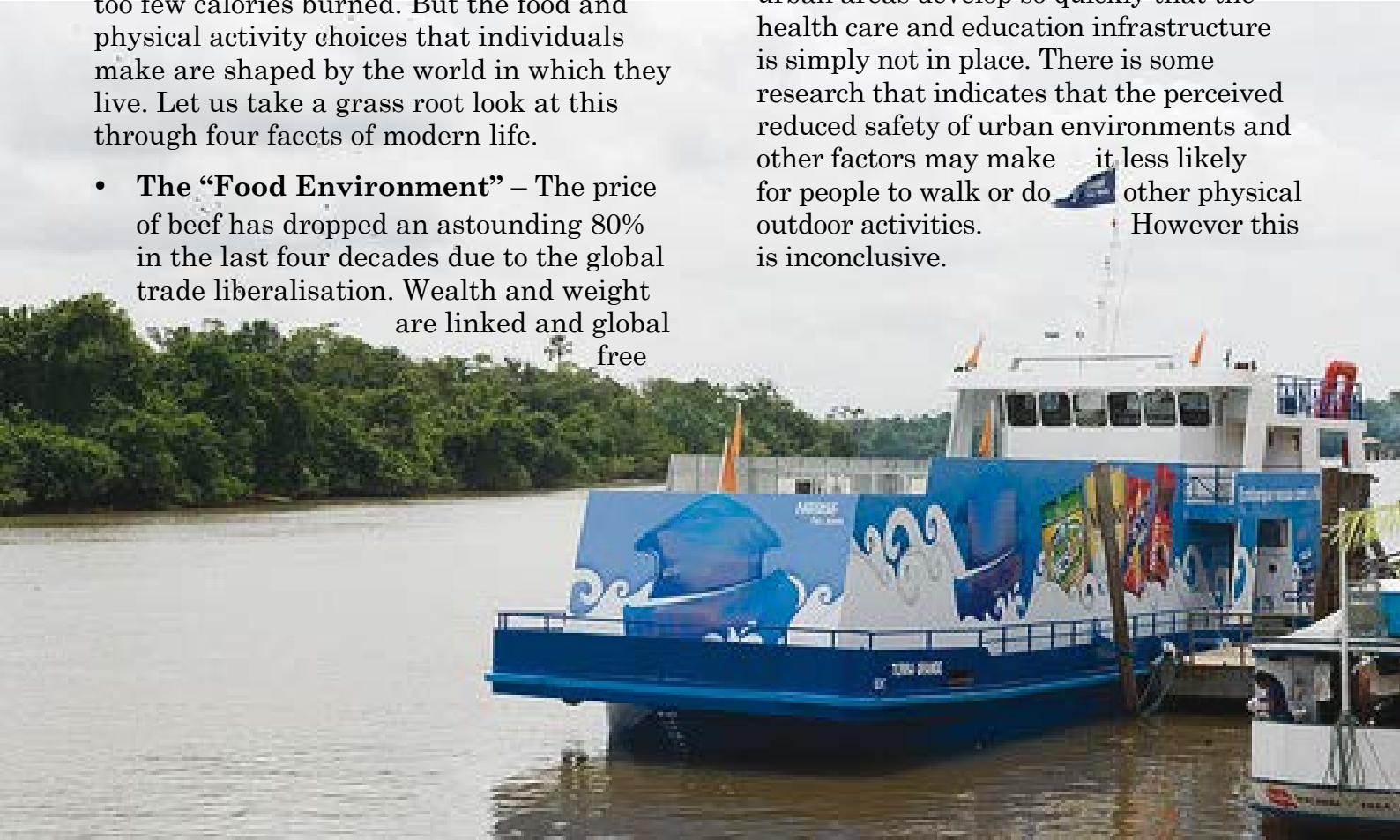
At an individual level, obesity results from energy imbalance—too many calories in, too few calories burned. But the food and physical activity choices that individuals make are shaped by the world in which they live. Let us take a grass root look at this through four facets of modern life.

- **The “Food Environment”** – The price of beef has dropped an astounding 80% in the last four decades due to the global trade liberalisation. Wealth and weight are linked and global free



trade and cheap food has caused people to move towards modern processed food while also giving them a television and access to food away from home.

- **The “Built Environment”** - Urbanisation does make it easier for people to receive health care and education, both of which can help curb obesity rates. But in many low- and middle- income countries, new urban areas develop so quickly that the health care and education infrastructure is simply not in place. There is some research that indicates that the perceived reduced safety of urban environments and other factors may make it less likely for people to walk or do other physical outdoor activities. However this is inconclusive.



NOTES ON A MOTIF

GLOBALISATION AND DIABETES – GREATER WEALTH..., AND WAISTLINES

visible when it comes to health. The good: Globalization has lifted millions of people out of poverty, reducing hunger and infectious disease, and, in turn, improving quality of life. The ill: The same social and economic shifts that have increased people’s wealth have also increased their waistlines and are driving the global obesity epidemic.

From 1970 to the present, the global trade volume of highly processed foods has increased more than four-fold. Import growth for this category of food has been highest in the emerging markets of the world, growing more than five-fold in the past 40 years. The liberalisation of international food trade and technology-

but now affects countries rich and poor alike. Asia’s large population and rapid economic development have made it an epicentre of the epidemic. Asian populations tend to develop diabetes at younger ages and lower BMI levels than Caucasians. Many low- and middle-income countries struggle with the so-called “dual burden” of obesity and underweight; but although malnutrition persists in many places, being overweight is rapidly becoming a more common problem than being underweight. For the first time in human history, the world has more overweight than underweight people! Globalisation has done this. It has brought fast-food chain franchises to Mumbai and SUVs to Shanghai, digital TVs to Dar es Salaam and supermarket barges to the Amazon River

Diabetes Positive Living; highlights from my practice in the Gulf region

By Dr Asma Deeb,

Consultant and Chief of Paediatric Endocrinology, Mafraq Hospital

I do not think anybody will argue that type 1 diabetes is a complex disease with many challenges attached. However, there are many sides of this disease that impact positively on children and families. In this review, I am going to highlight some aspects of the “good side of diabetes” and share some life experience from my daily practice. I am also going to point out some unique features in the culture of the area and how it impacts on the lives of children and young people with diabetes.

Positive impact of diabetes on children and families:

Families with children with diabetes get counselled on the importance of diet and exercise on diabetes control. As time goes on, families come to know the importance of a healthy life style in diabetes management. A healthy diet is difficult to stick to in the current era with its massive “fast food” industry. Many families, however, adapt a healthier life style for the whole family following the diagnosis of diabetes in one child. Families become more educated

about food contents

and food group components of individual meals. Some acquire the good habit of looking at food labels when shopping and choose the healthiest option to buy.

Diagnosis of diabetes and proper counselling by an expert multidisciplinary team encourage families to include exercise in their daily routine. Simple advice like taking the stairs instead of lifts or walking to the local market store instead of driving make people realise that exercise can be accommodated within the normal life.

Although modern insulin allows flexibility in timings of injection, people become more alert to their meals and snack timings. Knowing that many CHO-containing snacks require additional injection make people think twice about frequent snacking and encourages them to eat only if they are hungry. In addition, it prompts people to choose healthier snack/meal options.

Positive impact of use of technology on diabetes management:

There has been a revolution in the use of technology in the management of diabetes.

Technology is nowadays widely used both in diagnosis and treatment of diabetes. From the diagnostic point of view, children are

- **New Technology** - Labour-saving devices have curbed physical activity in many facets of people’s lives, resulting in society-wide declines in individual energy expenditure that further accelerate obesity’s rise. Many low- and middle-income countries have seen their workforces shift away from highly active jobs, such as farming and mining, to less active jobs in the manufacturing and service industries. Even in traditional jobs, such as farming, people expend less energy than they did decades ago, due to mechanized farm equipment.

Walking and bicycling

have frequently given way to

cars and mopeds.

With the growth of mass media and computer

technology, people are spending more of their time sitting indoors watching television and surfing the web, and less time in active outdoor play.

Increasing access to microwaves, washing machines, vacuum cleaners, and other labour-saving devices have begun to cut down on the human energy needed for household work in many countries.

- **Changing cultural norms** – Urbanisation also brings with it changes in cultural perspectives and norms. People who get less sleep tend to weigh more than those who get a good night’s sleep, and researchers have observed this trend not only in high-income countries but

also in low- and middle-income countries. Researchers speculate that the noise pollution, artificial lighting, and night life of urban environments may contribute to sleep deprivation. Psychosocial stress is a risk factor for obesity in Western countries and may also contribute to obesity in low- and middle-income countries, though more research is needed. Parents with greater purchasing power are tempted to give their kids the televisions, computers, and other treats that they themselves never had growing up, inadvertently adding to child health risks.



Scientific research

has

shown that Type 2 diabetes is largely preventable through modifications in diet and lifestyle. However translating these findings into practice, such as encouraging and maintaining long-term, sustainable changes in public policy, food environment, physical environment, and health systems brings challenges of its own. It is imperative to address these barriers in order to moderate the significant social, economic, clinical practice, and public health policy impacts of an escalating epidemic.



Diary of a Practitioner

provided with various glucose monitoring devices which vary in size, shape and function. These devices operate on various softwares and have a powerful visual impact. When downloaded at home or at the clinic, graphs and trends of blood glucose can be displayed in a simple, yet informative way. Children and young people are technology-oriented and engage more easily with visual aids. Having these facilities encourage them to look after their diabetes.

Use of an insulin pump is another face of technology in diabetes treatment. These smart devices enable children with diabetes a more flexible daily routine and improve their quality of life. Like glucose measuring machines, they come with powerful software which on downloading transforms data into various forms of graphs and charts that enable easier interpretation and interaction.



Insulin pump therapy and multiple daily injection of insulin are proven to be the better choice of treating type 1 diabetes. Both modalities of treatment require knowledge of carbohydrate content of food for proper insulin dose matching. This encourages people to pay particular attention to what they eat.

The power of diabetes on parents with affected children

There is no experience better than one's own. No matter how experienced doctors and nurses become in the field of diabetes, parents still have an additional factor that makes their experience more powerful and unique. There are many success stories around the world of parents who became famous advocates for diabetes. In my career, I came across a woman who had 2 children with type 1 diabetes and she deserves to be the ideal role model. This lady juggled a career and a family with two affected children. She built an asset in diabetes education as her profession and worked as a senior diabetes educator that benefited hundreds of children and families. Her personal experience added a special spark to her work as she managed every child with the feeling that this child is her own.

The other scenario that I came across is the many mothers who are illiterate and acquire this immense empowering willingness to learn. Many examples showed that mothers, when they wanted to be able to read for a child, they learnt. One particular mother received special tuitions to learn how to read numbers to be able to read her child's blood sugar reading. Many other mothers and fathers preferred to test insulin pumps on them before fitting them on their children, not only to make sure that their children will be comfortable with it but also to acquire personal experience to apply for managing their children.

Impact of parents' life experience with diabetes on further research and development

Parents with children with diabetes become eager to study and know more about diabetes. Their big dream (which is shared

with health care professionals) is to find a cure for diabetes. Many parents and older children start to regularly follow and search for various sources of knowledge and news about diabetes. On a regular basis, I get parents bringing articles, website links...etc to share and discuss. One particular issue of great importance is the willingness of these parents to participate in research projects and even clinical trials. I do not recall a single rejection from the parents' side when we approach them to consent for projects related to diabetes.

The power of diabetes in developing interpersonal relationships

I have practiced as a paediatrician for over 20 years and have met thousands of families and children. However, I have always felt that there is something special about families of children with diabetes. The disease has a power to connect families and health care professionals. It strengthens the relationship between both parties as it involves various aspects of child's life and never stops at prescribing insulin. Clinic visits for diabetes follow up has a special character that is not confined only to the medical part. There is always a mix of Medicine and Life in the discussion which gets into more of a "chat" character rather than a formal doctor-patient consultation. Affording the clinic time for health care professionals is crucial to build up this healthy relationship with parents and children and is a major factor in patients' satisfaction.

The field of diabetes and its impact on health care professional development

Diabetes is a complex metabolic disease with many remaining mysteries to be solved. This is particularly applicable to type 1 diabetes in which the actual trigger and aetiology of the disease is still not fully understood. Due to all the uncertainty surrounding it, there are always valid questions to be answered which open the door to a multitude of research opportunities. We see many young doctors

and nurses growing into senior researchers in the field of diabetes due to its richness of scientific challenges. Another factor leading to advancement and development is the use of technology, which has been intensively integrated in diabetes management. Many general nurses acquired the advanced experience of using these technologies and became specialist nurses and certified educators in diabetes.

There have been many generous bodies which supported our work with families of low income or no medical insurance. Of those, it is worth mentioning the Red Crescent of the UAE, Zayed organization for charitable activities and the Charity of his Excellency, Sheikh Khalifa.

These organisations have been a great help and support. They have accepted our requests to provide equipment, devices, glucose strips, insulin pumps and other requirements for children with diabetes.

Many pharmaceutical companies have provided tremendous support too. They are always at the front line when it comes to the need to support either families or professionals. Their role cannot be underestimated in enhancing service provision and education for children and families.

Special aspects from the Arab culture

Ramadan

Muslims observe the Holy month of Ramadan in which people fast from dusk to dawn. During the fasting period, no eating or drinking is allowed. In "Kuran", it is clearly indicated that children and sick people are not required to fast. However, the definition of sickness is debatable. Many scholars consider diabetes as sickness and advice people with type 1 diabetes not to fast, others, apply sickness for acute illnesses only. It is noticeable that young people with diabetes in the region feel strongly about the importance of fasting. Majority resist advice allowing them not to fast. Older children behave in the same way and insist to fast even when they get into dehydration, high or low blood glucose.

Interviewing many people in this scenario concludes that they feel more “normal” if they fast like others. If they fast like anybody else, they will not be discriminated against. The major element to this is their strong belief in Ramadan as one of the five main pillars of Islam, in addition to the feeling that they will be underestimated by other people who will see them as “sick” and probably “disabled”.

Herbal medications

The advice on herbal medication use spreads widely through media and the fact that herbs are natural produce encourage people to use them with the belief that they are harmless. I have come across many situations where desperate families went along the path of using herbs and stopped insulin putting their children lives at risk.

Rewarding by food

One noticeable observation in the region is that adults tend to reward children by food. Obviously, reward food is never a healthy option but chocolates and sweets come on the top of list. Giving children sweets is a way to show love and affection. Some close family members particularly older ones (commonly grandparents) find it hard to not offer children these likable rewards despite knowing that it is not good for them. They find it hard to accept “depriving” them and offer others who do not have diabetes. This attitude usually creates a lot of conflict, particularly between mothers and the offering person. Sometimes, it results in friction between the parents themselves.

Life style and family structure

The many grocery shops in the region offer cheap confectionery, high sugar-containing juice and energy drinks. They offer free and fast delivery to houses. These services encourage children and adolescents to buy the unhealthy option of food. Mixing of children in close communities add some burden on controlling a child with diabetes habits of eating. It is common for children to share food and treats which parents might not be necessarily aware of. In these routine circumstances, it will be almost impossible

to supervise a child’s every single food/sweet intake. This is particularly the case in school children who resist to be treated differently, so they engage in similar habits of their peers including those related to eating.

Happy stories with diabetes

1. WT was diagnosed with diabetes when she was 4 months old. She was presented to the emergency room very sick and required admission in the intensive care unit. She was diagnosed with diabetes and was started on insulin. Due to her very young age, her diabetes management was very difficult. Her mother used to give her up to six injections per day to control blood glucose which remained fluctuant with highs and lows.
2. Full assessment of her special case revealed that she has a rare type of diabetes caused by a gene defect. Confirming the gene mutation enabled us to stop her insulin and treat her with pills which not only controlled her blood glucose but transformed the whole family life.
3. MA is a 12 year old girl who was diagnosed with diabetes 3 years ago. Prior to diagnosis, she used to live with her father and paternal uncle’s two bedroom apartment. Her parents were separated and her mother lived abroad in her home country looking after a younger sibling with Down syndrome. MA and her father were not able to cope with the demand of diabetes care. She had a poorly-controlled glucose profile and required hospital admissions. As time went on, the parents realised that uniting the family again is in the best interest of MA and everybody. The parents re-united and shared care of MA who showed marked medical and psychological improvement.

Examples of Children and families with amazing attitudes

1. FS is a 12 year old young lady who I met recently in clinic. She was diagnosed with cancer when she was 7 months of age. Her treatment involved many chemotherapy courses and

radiotherapy sessions at that young age. She miraculously recovered from an aggressive tumour to relapse again at the age of seven. Her treatment the second time required extensive surgery involving excision of a big part of her pancreas. By the age of 12, she started to show signs of diabetes and her diagnosis was confirmed when she presented to a hospital a random blood glucose of over 500 mg.

2. FS and her family considered her life a “gift of God” and having diabetes gave them all power to accept living with it and perfect its management. Within weeks of diagnosis, she has mastered her carbohydrate counting and had a very good glucose profile with an HbA1c of 6.6%. Father commented that “all we can do is to keep thanking God that she is still with us. We will take diabetes as a gift that reminds us of how kind God is to cure our child from cancer”.

Medical differences

One striking feature is that children in the region seem to tolerate higher readings of blood sugar before going into the common complication of diabetes-ketoacidosis. Children may walk into clinic showing no ill-health symptoms when their blood glucose is well in excess of 400 or even 500 mg. This is also noticeable on downloading these children’s meters in clinic during follow up visits. The glucose reading could be excessively high without children showing any symptoms of acidosis or dehydration. Parents discover the high reading only when they check routinely before meals. Although this feature is favourable as going into dehydration and acidosis secondary to high blood glucose can be life threatening, it makes children accept living with higher blood glucose and encourages them to non-compliance with regular insulin injections. This will result in long term accumulation of sugar with a predisposition to chronic complications.

Causes of diabetes; special features

In the Gulf and other Arab countries, there is strong genetic factor to diseases and diabetes is not an exception. The rate of consanguinity

is high resulting in high incidence of hereditary diseases. Over the last years of practice in the UAE, I came across fascinating causes of diabetes with unique features. I had a series of 20 patients from the region with what is called “monogenic diabetes”. This type of diabetes is caused by a single genetic defect unlike type 1 diabetes which is an autoimmune disease. In these children, diagnosis of diabetes is usually very early in life with an average of 4 months of life. I first met a family who had 6 affected children diagnosed within a course of 3 years. The children presented with severe diabetes at 2-5 months of age and grew to have a very challenging diabetes to manage as their pancreas do not produce much, if any, insulin. The sad part of the story is that this particular type of diabetes is associated with other systemic involvement mainly liver impairment and skeletal defect. This form of neonatal diabetes is called Wolcott Rallison syndrome and its prognosis is poor.

I have also come across other forms of diabetes which involve the nervous system. These children tend to have severe diabetes, epilepsy and developmental delay (DEND syndrome). Like the case with Wolcott Ralison syndrome, both diseases are inherited in an autosomal recessive manner with both parents being carriers for the disease and the chance of 25% for having another affected child.

I have also looked after 4 siblings (ages between 11 and 18) who had a rare form of diabetes due to insulin gene defect. The family worked hard on their challenging diabetes and impressively coped with the huge burden of 4 affected children with diabetes.

Finally, these children and families are an inspiration. Many of them make real role models of how to deal with the burden and the challenges of life. Diabetes affects the whole family. They need to consider it during eating, exercising and with almost all of their life routines. It is a difficult disease to live with but can be a source of power to make children grow into genius adults.

We all pray for a rapid advancement in Medicine until we all celebrate the long awaited cure.

You may have come across talk about diabetes leading to blindness. It is true that people with diabetes have an increased risk of

CARING FOR THE WINDOWS OF THE SOUL

pressure in the eye, while others involve surgery.

Cataracts

A cataract is a condition that can occur among people without diabetes, but people with diabetes are 60% more likely to develop cataracts. They also tend to develop them at younger ages and have them progress faster. With a cataract the clear lens of the eye begins to cloud and block light.

To help deal with mild cataracts, you may

types of retinopathy: non-proliferative and proliferative.

Non-proliferative retinopathy

This is the most common form of retinopathy. Here capillaries in the back of the eye balloon and form pouches. Non-proliferative retinopathy can move through three stages (mild, moderate, and severe), as more and more blood vessels become blocked.

Macular edema

While retinopathy does not usually cause vision loss at this stage, the capillary walls

may lose their ability to control the passage of substances between the blood and the retina. Fluid can leak into the part of the eye where focusing occurs, the macula. When the macula swells with fluid, a condition called macula edema, vision blurs and can be lost entirely. Although non-proliferative retinopathy usually does not require treatment, macular edema must be treated, fortunately



need to wear sunglasses more often and use glare-control lenses in your glasses. For cataracts that interfere greatly with vision, doctors usually remove the lens of the eye. Sometimes the patient gets a new transplanted lens. In people with diabetes, retinopathy can get worse after removal of the lens, and glaucoma may start to develop.

Retinopathy

Diabetic retinopathy is a general term for all disorders of the retina caused by diabetes. There are two major

blindness, but at most people are likely to suffer from nothing more than minor eye disorders.

Regular check-ups though are crucial in ensuring that the minor problem is kept minor. In the event of a major problem it is absolutely vital you have treatments that work well if you begin them right away.

Insight

Let us look at how the eye works; this will help us understand eye disorders. The eye is effectively a ball engulfed in a tough outer membrane. The covering in front is clear and curved. This curved area is the cornea, which focuses light while protecting the eye.

On passing through the cornea the light travels through a space called the anterior chamber (which is filled with a protective fluid called the aqueous humor), through the pupil (which is a hole in the iris, the coloured part of the eye), and then through a lens that performs more focusing. Finally, light passes through another fluid-filled chamber in the centre of the eye (the vitreous) and strikes the back of the eye, the retina.

The retina converts these images into electrical signals, which the brain receives and decodes. There is a part of the retina that is specialised for seeing fine detail. This tiny area of extra-sharp vision is called the macula. Blood vessels in and behind the retina nourish the macula.

Now let us look at how diabetes leads to certain conditions in the eye.

Glaucoma

People with diabetes are 40% more likely to suffer from glaucoma than people without diabetes. The longer someone has had diabetes, the more common glaucoma is. Risk also increases with age. Glaucoma occurs when pressure is built up in the eye. In most cases, the pressure causes drainage of the aqueous humor to slow down so that it builds up in the anterior chamber. The pressure pinches the blood vessels that carry blood to the retina and optic nerve. Vision is gradually lost because the retina and nerve are damaged. There are several treatments for glaucoma. Some use drugs to reduce



treatment is usually effective at stopping and sometimes reversing vision loss.

Proliferative retinopathy

In some cases, after several years of progress the more serious retinopathy is developed. Here the damage to the blood so severe they close off. The new blood vessels in response begin growing in the retina. These new vessels are weak and can leak blood, blocking vision, and which is a condition called vitreous haemorrhage. The new blood vessels can also cause scar tissue to grow. After the scar tissue shrinks, it can distort the retina or pull it out of place, a condition called retinal detachment.

How is it treated?

Huge strides have been made in the treatment of diabetic retinopathy. Treatments such as scatter photocoagulation, focal photocoagulation, and vitrectomy prevent blindness in most people. The sooner retinopathy is diagnosed; the more likely it is that these treatments will be successful. The best results occur when sight is still normal.

In photocoagulation, tiny burns are made on the retina with a special laser. These burns seal the blood vessels and stop them from growing and leaking.

In scatter photocoagulation (also called pan-retinal photocoagulation), hundreds of burns are made in a polka-dot pattern on two or more occasions. Scatter photocoagulation reduces the risk of blindness from vitreous haemorrhage or detachment of the retina, but it only works before bleeding or detachment has progressed very far. This treatment is also used for some kinds of glaucoma.

Side effects of scatter photocoagulation are usually minor. They include several days of blurred vision after each treatment and possible loss of side (peripheral) vision.

In focal photocoagulation, a laser is aimed precisely at leaking blood vessels in the macula. This procedure does not cure blurry vision caused by macular edema. But it does keep it from getting worse.

Photocoagulation is no longer applicable when the retina has already detached and a lot of blood has leaked into the eye. The next step is surgery to remove scar tissue and cloudy fluid from inside the eye a process called vitrectomy. The earlier the operation occurs, the more likely it is to be successful. When the goal of the operation is to remove blood from the eye, it usually works. Reattaching a retina to the eye is much harder and works in only about half the cases.

There are two types of treatment for macular edema: focal laser therapy that slows the

leakage of fluid, and medications that can be injected into the eye that slow the growth of new blood vessels and reduce the leakage of fluid into the macula.

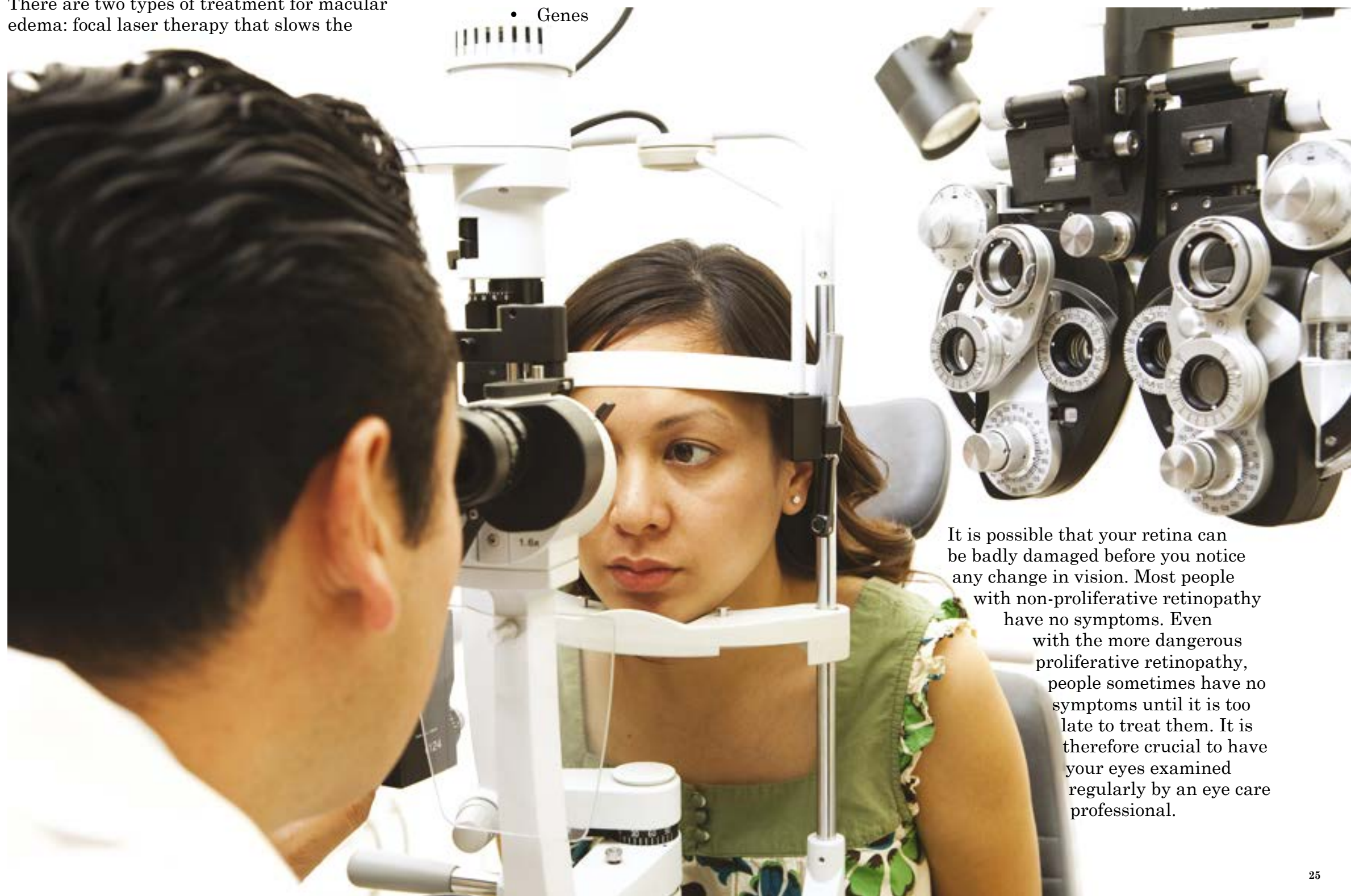
Am I at Risk for Retinopathy?

Several factors influence whether you get retinopathy:

- Blood sugar control
- Blood pressure levels
- How long you have had diabetes
- Genes

The longer you've had diabetes, the more likely you are to have retinopathy. Almost everyone with type 1 diabetes will eventually have non-proliferative retinopathy. And most people with type 2 diabetes will also get it. But the retinopathy that destroys vision, proliferative retinopathy, is far less common.

People who keep their blood sugar levels closer to normal are less likely to have retinopathy or to have milder forms.



It is possible that your retina can be badly damaged before you notice any change in vision. Most people with non-proliferative retinopathy have no symptoms. Even with the more dangerous proliferative retinopathy, people sometimes have no symptoms until it is too late to treat them. It is therefore crucial to have your eyes examined regularly by an eye care professional.

Moorfields Eye Hospital Dubai

One of the most frequent and potentially serious health complications of diabetes is diabetic retinopathy, which damages the eye and affects vision – and can lead to blindness. When it comes to diabetes related complications such as retinopathy, prevention is better than cure. Health complications occur in the vast majority of people with diabetes and for a high percentage they could have been avoided with proper and vigilant monitoring and treatment. Moorfields Eye Hospital Dubai (MEHD) is one of the GCC’s leading hospitals providing world class eye care.

Founded in 1804 and opened in 1805 in London, Moorfields is the oldest and one of the largest centres for ophthalmic treatment, teaching and research in the world. In 2007, Moorfields Eye Hospital opened

Dr Avinash Gurbaxani, Consultant Ophthalmic Surgeon, offers his advice on diabetic retinopathy and tips to prevent one of the most common complications caused by diabetes and which can lead to permanent loss of vision if not treated. “Vision related problems are some of the most common and serious complications of diabetes,” says Dr Gurbaxani. “Of course, the single most effective treatment for diabetic eye disease is prevention – good control of diabetes and any associated high blood pressure can delay or avoid significant eye problems. Prevention of diabetic eye disease starts with regular eye examinations which can so often provide an indicator of the diabetes or blood pressure control. Regular



its first overseas in Dubai - Moorfields Eye Hospital Dubai - located at the Al Razi Medical Complex in Dubai Health Care City. MEHD has quickly become one of the GCC’s premier eye hospitals. The facility provides day case surgery and outpatient diagnostic and treatment services, for a variety of surgical and non-surgical eye conditions. Owned and managed by the NHS Foundation Trust, it maintains a close link with Moorfields in London, to ensure that patients in the GCC have access to the most advanced eye care in the world.

Moorfields has a team of 10 specialist consultants based permanently in Dubai and has also established a specialist team of four retinal consultant surgeons and ophthalmologists in Dubai focusing on medical retinal diseases such as diabetes. The specialist team of retinal consultant surgeons and ophthalmologists comprises Dr Avinash Gurbaxani; Dr Edoardo Zinicola; Dr Jana Sheqem; and Dr Imran Ansari.



screening should begin from an early age, regardless of whether there are vision symptoms or not.”

According to Dr Edoardo Zinicola, Consultant Vitreoretinal Surgeon and Medical Retina Specialist, once retinopathy is present, direct

eye treatment may be needed and the type of treatment depends on the problem. “There is no effective treatment for the parts of the retina where blood vessels have disappeared,” he comments. “Laser photocoagulation remains the first line of treatment for both new and leaking vessels. Injections of steroids and medicines known as VEGF blocking agents also have a role and where the eye disease is advanced then surgery can help.”

Moorfields has also extended its services to include teaching and research – all part of the Hospital’s mission - in addition to treating patients. In 2013, Moorfields announced an MOU with Dubai Healthcare City to expand the research and teaching activities there, Professional events and similar initiatives are



part of the hospital’s commitment to continuing medical education, for its own team and community physicians, Much of this effort has been directed at diabetes related diseases, such as diabetic retinopathy.

For example, in 2013, more than 170 medical professionals from the UAE’s diabetes medical community attended a professional scientific conference jointly hosted by Moorfields Eye Hospital Dubai and Novartis. The meeting attracted GPs, endocrinologists and ophthalmologists, from the public and private sectors across

the UAE. The audience learned more about the vision related complications of diabetes and the latest therapies available, through a series of presentations by leading specialists including those from Moorfields in Dubai and London, and the Imperial College London Diabetes Centre in Abu Dhabi. Among the topics discussed were retinal vein occlusion (RVO); treatment options of macular edema in RVO; Glaucoma and vascular disorders; diabetes management; laser and pharmacotherapies in diabetic macular edema; current issues on diabetic macular edema; and diabetic retinopathy screening.

As Dr Sobha Sivaprasad, consultant Ophthalmologist from Moorfields Eye Hospital London puts it “Sharing knowledge and expertise is essential to addressing effectively the challenge of diabetes. The UK has one of the most established diabetes screening programmes and we can help to bring this expertise to the UAE.”

Over the last seven successful years of operation in Dubai, Moorfields has treated more than 31,000 patients, many from the GCC and wider Middle East region. Looking ahead, Moorfields Dubai will remain the lead centre of excellence in the UAE whilst the growing team at Moorfields will continue to expand the services at the Dubai hospital and also prepare to extend services to patients in other parts of the UAE.

Moorfields Eye Hospital Dubai
Tel: +971 4 429 7888;
Web: www.moorfields.ae



Crystal Bowersox talks about how she manages her diabetes in ‘the biz’

Courtesy: Diabetes Forecast Magazine

Crystal Bowersox doesn't look like the typical American Idol contestant. Most of them are squeaky-clean pop star-ready. Bowersox, on the other hand, has a head of dreadlocks and a sound that's one part folk, one part rock, and another



part country. She plays guitar, writes her own

songs, and has a voice that's often compared to rock legend Janis Joplin. Her talent won over the judges, who remarked that her laid-back performing style and lack of gimmicks were a breath of fresh air in the competition.

During Idol's ninth season, Bowersox, 25, learned more than how to give a great performance; she discovered the importance of diabetes control. Though she's had type 1 since she was 6½ years old, the competition took time away from her diabetes management—and landed her in the hospital.

Q. You were diagnosed with diabetes at a young age. How did growing up with the disease affect you?

It's one of those things that have shaped me in every way, really. In school you always received a little extra attention from the teachers, and



sometimes the other students didn't understand why you got to have a snack in class. You're constantly branded as different growing up, and now as an adult it's something that I've come to embrace and be proud of. But it was definitely difficult as a kid and a teenager.

Q. You've mentioned before that affording diabetes supplies was hard when you moved away from home. How did you manage?

Thankfully, my dad had a job at a local factory where he had good health insurance, and it was family coverage so we were able to have all the supplies and things we needed. Things were different when I moved out on my own. I had to have a full-time job and a full-time academic career as well just to maintain that health insurance coverage. I was tired. I was working really hard to take care of myself. There were times when I couldn't afford everything I needed and you do what you have to do to get by. I've begged for insulin at pharmacies.

Q. You had been writing and playing music for years before you went on American Idol. What prompted you to audition?

I had avoided it for years. And then I had my son [Tony] in 2009 and I felt that time was a very valuable thing. Really the question was, "Why not?" So I did it, and it has changed my life in the most positive way.

Q. How did the show change you as a musician?

Idol really forces somebody to be able to react to things at the drop of a dime. You



have to perform a song after you've sung it maybe once or twice. It makes you demand more of yourself. And I definitely learned to demand more of myself. I've learned things about self-discipline that I never knew I knew or could know, especially with my diabetes.

As you may know, I fell ill in March, pretty early in the competition. Mostly it was because I was almost ashamed of my

diabetes. I didn't want to tell the producers I was diabetic because I didn't want that special attention. I didn't want to be branded as different. I let my priorities get mixed up, and I was sick because of it. I wasn't checking my blood sugar regularly. I was more concerned about band rehearsals than I was taking insulin. And that's not healthy. That's why I'm part of the OneTouch [blood glucose meter advertising] campaign now, because I want to really spread the message that to live your life first, you have to be alive. Take care of yourself, manage your diabetes, and anything is possible in this world.

Q. American Idol's producers wanted you off the show once you were hospitalized. How did you react?

[Executive producer] Ken Warwick came into my room and said, "You're off the show," and I thought he was joking. It took him a few times saying it for me to really believe him. It was devastating to me.

That was when I made the decision that if I were to be voted off the show, then that was fair and just. But for me to allow diabetes to control my life and possibly cost me everything that I've worked hard for, it just wasn't going to happen. I was not going to let diabetes be the thing to destroy me. And now I'm coming to terms with that, and I'm learning more and more every day how to manage my diabetes and to maintain good control so I can live my life first.

Q. How did you persuade him to let you stay on?

I think Ken just saw in me the fire and passion that a lot of people do, and I definitely let it out in that room that day. I demanded a meeting with the head honchos, the people running the show. I made an agreement that in order to stay on the show I'd have to give up all of my medical privacy and do what I was told and really respect that authority. I was reluctant at first, but just realizing now it was all for my own good.

It takes a team to manage diabetes. It takes a network of people, family, your friends. I'm

grateful, I'm so happy all of that happened. It was really a wake-up call for me. They had hired a nurse who was on top of me constantly about checking my blood sugar and making sure I was monitoring what I was eating. [The nurse] basically enforced all the things I knew how to do—I just wasn't doing them. It was the best thing that ever happened to me.

Q. How do you manage your diabetes now?

I use [a] glucose meter for checking my sugar. I do use [an insulin] pump, and I wear a [continuous glucose monitor] as well. You know, information is power. The more information you have, the tighter your control can be and the more productive your life can be. It's all about quality of life. My quality of life is better than it's ever been as far as my health and everything goes.

Q. Does performing affect your blood glucose?

It does affect it, actually. Right now my routine is: I'll check my sugar one to two



hours before hitting the stage. And then if it's too high or too low, I can adjust accordingly. If it's too high, I'll take half the amount of insulin I'm supposed to take because adrenaline makes your blood sugar go up. But it also comes down on its own. You don't have to correct for an adrenaline high, and if you do, you end up bottoming out after the show. It's been a struggle to find that fine balance, but I feel like I've got it now.

Q. What role does diabetes advocacy have in your future music career?

I'll always be a diabetic. I mean, I hope not. I hope there's a cure in my lifetime, but as it stands right now I'll always be a diabetic. And I'll always be a musician. It's just part of my being. If there ever comes a time when I'm not an advocate for people with diabetes, there's something wrong happening there. I can't keep my mouth shut about it. I want other people living with diabetes to know that anything is possible as long as they maintain good control.

Q. Was spreading the word about diabetes always part of your plan?

Before Idol I didn't always have great control, but I always looked up to Mary Tyler Moore. She was a role model of mine. She was the only person in a public forum that I knew of who had type 1 diabetes. And that was a huge help to me as a kid, thinking that here's somebody who has had this great acting career and done so many things and is really giving back to the diabetes community. I want to be like that. I didn't think that it would ever be possible for me, and now I realize it is.

Q. What message do you hope to send to the diabetes community?

My message for the diabetes community is just, every day is a new day. You can strive for good control, but remember not to beat yourself up if you have a high or a low. None



of us are perfect. As humans, we're made to make mistakes. But the overall goal is to strive for good control.

If you control your diabetes first, it cannot control you. You can live your life first. Embrace the changes you need to make to have good control. Don't shun them. Don't ignore your diabetes or it will ignore you.

Q. Have any fans told you that you've inspired them?

There was a kid who showed me his insulin pump and he's like, "Man, I want to be a singer like you someday." I was like, "Well, there's no reason you can't. There's absolutely no reason you can't."

I've signed insulin pumps and I've signed glucose meters. It's been a lot of fun, and definitely I'm honored to know that there are people who look up to me. Honored and scared. It's amazing. It's a heavy weight on my shoulders. But it also keeps me in line. It keeps my sugars in line because I know that responsibility is there, not only to the people but also to my son.



Advancements in smartphone technology coupled with the proliferation of data connectivity have resulted in increased interest and unprecedented growth in mobile applications for diabetes self-management. Diabetes self-management education (DSME) is a critical element of care, and

day-to-day management, in particular, the need for frequent self-monitoring of blood glucose and regular adjustments in insulin dosing. Additionally another difficulty is a patient's logbook, either paper-based or electronic, that a clinician is presented with at a consultation. Clinicians often face a lack of information on which to base their advice regarding their patient's self-care. Utilising mobile phone technology may help to overcome these difficulties.

The worldwide prevalence of mobile phones make them a powerful platform for providing individualised health care delivered at the patient's convenience. Several reviews have documented the effectiveness, potential, and challenges in using mobile phones to improve health outcomes in diabetes. Growing evidence suggests that utilising mobile phones may improve diabetes self-management and clinical outcomes; however, this evidence is much stronger for type 2



test strips and a meter that connects to the user's smartphone, and a website application enabling patients, health professionals and carers to access the blood glucose data. Developed by New York-

smartphones. Smartphone owners are now more prevalent within the overall population than owners of traditional mobile phones. Smartphones allow individual users to install, configure, and run specialised applications on their phone. Increasing numbers of people are using these applications to self-manage chronic diseases. For example, it was identified that in 2011 there were more than 260 diabetes-related iPhone applications available for download from the Apple online store.

Advances in the area of mobile and wireless communication for healthcare (m-Health) along with the improvements in information science allow the design and development of new patient-centric models aiding in the provision of personalised healthcare services, increase of patient independence and improvement of patient's self-control and self-management capabilities. In November 2013, a new cloud-based mobile health platform that allows people with diabetes to manage their condition from their mobile handsets was unveiled. The app works with the 'all-in-one', pocket-sized Dario blood glucose monitoring device, which comes with a lancet,

based LabStyle Innovations, the Dario iOS mobile app offers easy, instant and real-time monitoring of blood sugar levels and also provides users with helpful insights and tips on what actions to take, based on their reading.

Here lies another question. Although technology has the potential to revolutionise the health care system, the rapid development and introduction of these new tools and resources has left many trying to catch up, including the FDA. The agency recently issued guidance addressing the possible regulatory issues related to mobile health applications. A major question is determining at which point a mobile app or program becomes a medical device.

MOBILE SELF-MANAGEMENT – ITS NECESSITY, SCOPE AND JEOPARDIES

is necessary to improve outcomes for people living with diabetes. Persistently poor glycaemic control in adult type 1 diabetes patients is a common, complex, and serious problem initiating significant damage to the cardiovascular, renal, neural, and visual systems. In many patients, glycosylated haemoglobin levels (HbA1c) are unsatisfactory, with levels consistently above 8.0%. In the pursuit of improving metabolic control, the importance of self-monitoring blood glucose is widely appreciated and recommended as a routine part of management in patients with type 1 diabetes. There are a number of barriers to glycaemic control in type 1 diabetes, including the fear of hypoglycaemia and the demands of

populations than type 1 populations.

In recent years, mobile phones have improved dramatically in both design and function, from simple call and text devices to the more



It seems like everyone is in a rush these days. Going to work or school, driving the kids to practice, running to a meeting or heading off to the gym... we can't seem to slow down! While it's great to be active, busy lifestyles can make it difficult to eat healthily, especially when you find yourself at the nearest fast-food restaurant wolfing down a burger and fries. Eating high-calorie, fatty foods can lead to weight gain; raise your cholesterol and blood pressure levels; and make it harder to manage your diabetes.

EATING ON THE FAST TRACK

Is it possible to eat on the run and still make healthy choices? Yes!

FAST AND HEALTHY CHOICES

when you think of fast food, you probably picture greasy, fatty foods that are loaded with calories. While that may be true, the

good news is that more and more fast-food restaurants now offer many healthy options. To make things easier for you be sure to do your homework ahead of time so that you know what to order the next time you are eating on the go.

EATING AT HOME

Did you know that one out of four people in the United States eat out every day? While eating out is fun, many people eat away from home because they think it takes too long to cook a meal. It is possible to eat healthy without spending hours in the kitchen. The key is planning. First, take some time on a weekend to sit down and plan meals for the week. Dig out your recipe box and cookbooks and plan menus for the week. Make sure that your recipes are healthy and not loaded with fat and salt. If you do not have healthy recipes, go for a cookbook that lists the calorie, carbohydrate and fat content at the end of each recipe. This will make it easier to fit recipes into your meal plan.

Once you have planned your menus for the week, make a list and go shopping. This is a big time saver, since you do not have to shop during the week. Be sure to record your menus and shopping lists to use for future meals. Stores offer many time-saving choices for you, too, such as pre-cut and peeled vegetables and bags of salad. They may cost a little more than vegetables that you prepare yourself, but the extra money you spend can save you time.

FULL OF FAT

so, what should you stay away from at fast-food places?

- Large or super-size burgers
- Cheese
- Fried chicken or fish sandwiches
- Chicken nuggets
- French fries
- Onion rings
- Egg, sausage and cheese sandwiches
- Pizza with extra cheese or high-fat meat toppings
- High-fat sauces and salad dressings
- Milkshakes



It's okay to treat yourself every now and then, but try to limit the above foods if you eat out on a regular basis.

SOME OF THE BETTER CHOICES

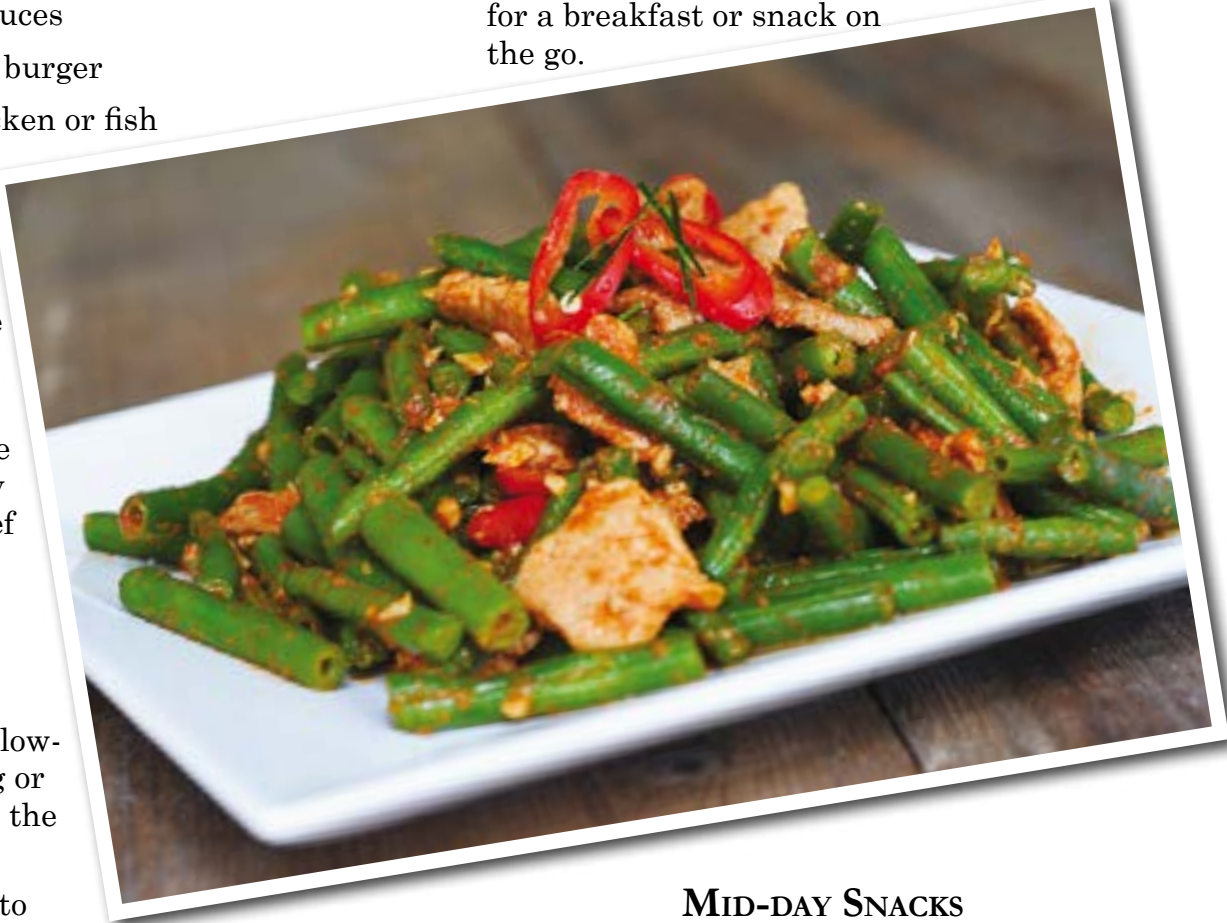
- Plain burger without the cheese and “special” sauces
- Vegetarian burger
- Grilled chicken or fish sandwich
- Broiled or roasted chicken without the skin
- Sandwich wraps made with turkey or roast beef
- Thin-crust pizza with vegetable toppings
- Salad with low-fat dressing or dressing on the side
- Baked potato with vegetables
- Vegetable or minestrone soup
- Non-fat or low-fat milk or water
- English muffins
- Yogurt
- Fresh fruit

BREAKFAST

Many people either skip breakfast or grab something high in calories and fat because they're in too much of a hurry in the morning. Breakfast is one of the most important meals of the day, so even if you're short on time, try to choose something good

for you. Rather than stopping at the local doughnut shop or fast-food restaurant, keep foods on hand at home, in your car or at your desk so you don't get caught short.

No time to add milk to cereal? Mix a couple of your favourite cereals with some dried fruit and nuts, portion into sandwich bags and throw some in your purse or briefcase for a breakfast or snack on the go.



MID-DAY SNACKS

snack attacks often strike in the afternoon when your energy is low. It's okay to eat a snack, but beware of the office vending machine or the nearest convenience store. Candy bars, potato chips or cookies might fill you up, but they can also raise your blood glucose levels and won't give you lasting energy. Once again, think ahead and keep healthy snacks.

Whether you eat out or eat in, healthy eating is possible, even when you are short on time. Remember that planning ahead will help you make good choices. You may be on the fast track, but you will get there happier and healthier if you make time to take care of your eating along the way.

The Low CALORIED ANTIOXIDANT BLACKBERRY THAT OFFERS MORE THAN MOBILE CORRESPONDENCE

Jamun or Jambolan, scientifically known as Syzygium cumini is sometimes argued to be the best fruit for diabetes! The black berry is a powerful antioxidant that helps to improve immunity but its most profound benefit lies in being of special use in the treatment of diabetes. It is the produce of an evergreen tropical tree in the flowering plant family Myrtaceae, native to the Indian Subcontinent, and has been used for blood glucose or blood sugar support for centuries.

Modern science confirmed this by showing that the chemical jamboline in the seeds is the key ingredient responsible for the anti-diabetic action. The fruit, the seeds and even the juice of the play an important role in the treatment of diabetes. Jamboline is a type of glucose which checks the conversion of starch into sugar in cases of increased production of glucose, the reason behind your high sugar levels. of the bark, seeds and leaves have been cause a marked prolonged decrease and glycuria (sugar in studies have shown that jamun has hypoglycaemic effects with up to 30 percent reduction in blood sugar. The seeds are rich in alkaloids which have the hypoglycaemic effects. People with diabetes can consume jamun fruit daily to their sugar levels, which helps to enhance the and sensitivity.

In addition, powdered seeds can be taken as an adjuvant both for type-2 diabetes, insulin dependent or non-insulin dependent. The real benefit is at the stage of IFG (Impaired fasting glucose), or what is commonly known as pre-diabetes, which can be well-controlled with jamun, both with the fruit as well as the seed powder. Regulation of IFG prevents the early onset of diabetes and further conditions.

Its miracles do not stop there either. As a good source of vitamin A and C, it can prove priceless for eye and skin health. Jamun acts as a coolant and also possesses anti-diarrheal properties, so is beneficial for the digestive system. Its anti-cancer and anti-viral properties, which improve immunity, come from its rich antioxidants.



The Jumeirah Corniche Development Project

It was estimated in July 2011, that four out of five people in Dubai do not get enough exercise. The results were part of the overall Dubai Household Health Survey (DHHS), which examined 5,000 households, half of which were Emirati. The survey was jointly conducted in 2009 by Dubai Health Authority and the Dubai Statistics Centre.

The survey revealed that young adults in Dubai between the ages of 25 and 39 exercised the most, at 21.8 per cent, followed closely by the 18 to 24 age range at 21.2 per cent. However, only 12.7 per cent of those 60 and over who were interviewed did sufficient exercise. Only 19 per cent of Emiratis, both men and women, did enough exercise to stay healthy. And just five per cent of Emirati women 60 and above did enough exercise, the survey found, while seven per cent of Emirati men in the 40 to 59 age bracket exercised enough to stay healthy.



exercise, and they can manage them better if they walk daily and exercise,” said Dr Eldaw Abdalla Suliman, the head of research and performance management at DHA’s health policy and strategy sector.

Recent developments are likely to be a huge effort to combat this. Sports and fitness enthusiasts have found new excitement with the announcement of another feature that will add to Dubai being a lifestyle destination. The announcement and sanctioning of the Jumeirah Corniche Development Project by His Highness Shaikh Mohammad Bin Rashid Al Maktoum, Vice-President and Prime Minister of the UAE and Ruler of Dubai, will change the way cyclists and runners will train and work out.

The Jumeirah Corniche project will be 14 kilometres in length, making it the longest corniche in the emirate. Shaikh Mohammad directed the linking of both the walkway and the jogging track with the Dubai Canal Project, and for the corniche project to be completed in a year’s time. He stated: “Our objective is to achieve people’s happiness... we are keen to establish all the necessary components to make nationals, expatriates and visitors happy and enjoy quality life. Our developmental projects are integrating to attain this ultimate goal. We are committed



to investing in building healthy human capital through providing an ideal enabling environment.”

Once completed, the project will facilitate a variety of sports, including jogging, walking, swimming, rowing and other activities that suit families and contribute to enhancing physical fitness.



“The results strongly advocate the need to promote regular exercise, as just about one-fifth of our population gets sufficient exercise that is required to stay healthy, and among Emiratis aged 40 to 59 years, only seven per cent get enough exercise to stay healthy,” said Laila Al Jassmi, the chief executive of the health policy and strategy sector at the DHA.

“People can avoid a lot of chronic diseases if they

Islets of Fun



By restricting both a patient’s activity and caloric intake, the controversial “Duct Tape” therapy proved an effective alternative to traditional diabetes treatment.



“I don’t think this is what your doctor meant by lowering your carbs, honey.”

Here are steps you can take to avoid eye problems.

First and most important of all, keep your blood sugar levels under tight control. In the Diabetes Control and Complications Trial, people on standard diabetes treatment got retinopathy four times as often as people who kept their blood sugar levels close to normal. In people who already had retinopathy, the condition progressed in the tight-control group only half as often.

These findings reveal that you have a lot of control over what happens to your eyes. Also, high blood sugar levels may make your vision temporarily blurry.

Second, bring high blood pressure under control. High blood pressure can make eye problems worse.

Third, quit smoking!

Fourth, have a dilated eye exam at least once a year. Having your regular doctor look at your eyes is not enough, nor is having your eyeglass prescription tested by an optician. Only optometrists and ophthalmologists can detect the signs of retinopathy. Only ophthalmologists can treat retinopathy.

Eye Care



Fifth, see your eye care professional if:

- Your vision becomes blurry
- You have trouble reading signs or books
- You see double
- One or both of your eyes hurt
- Your eyes get red and stay that way
- You feel pressure in your eye
- You see spots or floaters
- Straight lines do not look straight
- You can't see things at the side as you used to.

When to See an Eye Care Professional

If you are between 10 and 29 years old and have had diabetes for at least 5 years, you should have an annual dilated eye exam. If you are 30 or older, you should have an annual dilated eye exam, no matter how short a time you have had diabetes. More frequent exams may be needed if you have eye disease.

If you have any changes in your vision

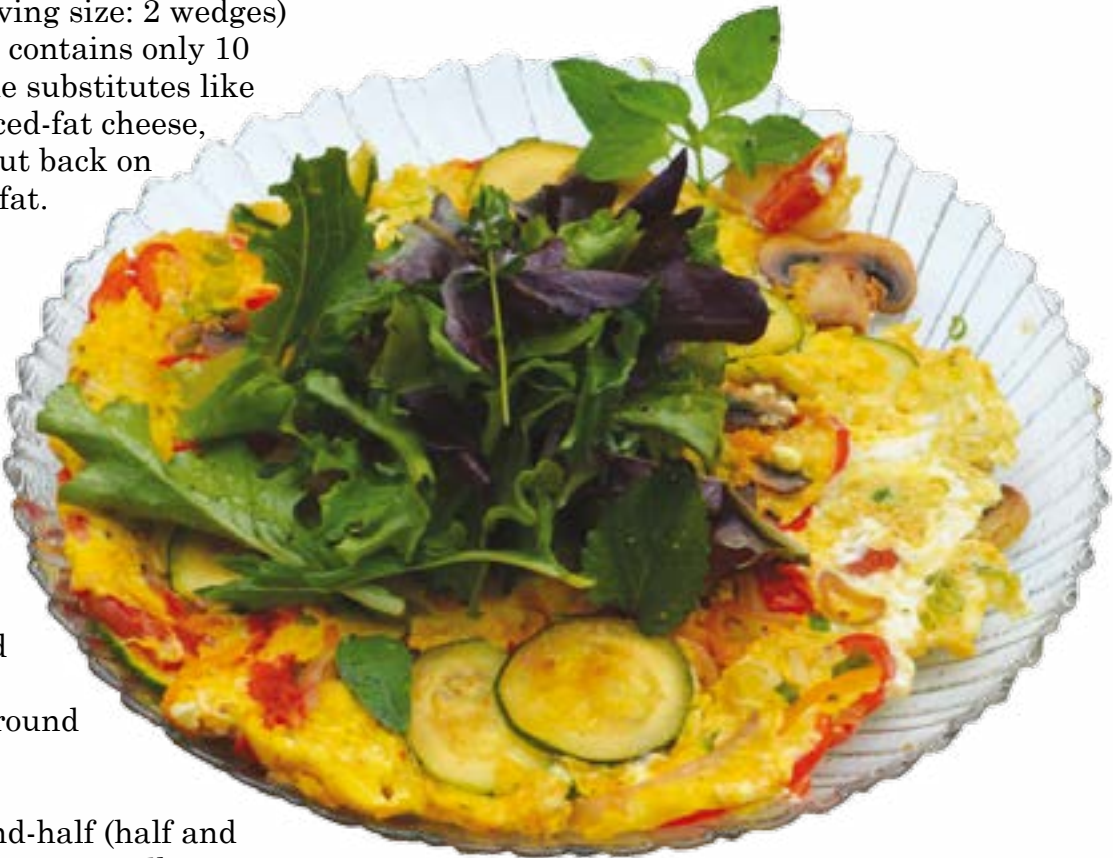
You should have a dilated eye exam if you are pregnant or planning to get pregnant.

Veggie Sausage-Cheddar Frittata

Prep Time: 5 minutes
Cook Time: 11 minutes
Yield: 4 servings (serving size: 2 wedges)
A serving of this dish contains only 10 carbohydrates. Simple substitutes like veggie sausage, reduced-fat cheese, and egg whites also cut back on unhealthy saturated fat.

Ingredients

- Cooking spray
- 1 green bell pepper, chopped
- 1 (8-ounce) package pre-sliced mushrooms
- 4 (1.3-ounce) frozen vegetable protein sausage patties, thawed and crumbled
- $\frac{1}{8}$ teaspoon salt
- $\frac{1}{8}$ teaspoon freshly ground black pepper
- 1 cup egg substitute
- $\frac{1}{4}$ cup fat-free half-and-half (half and half is a mixture of one part milk to one part cream)
- $\frac{1}{2}$ cup (2 ounces) shredded reduced-fat sharp Cheddar cheese



Preparation

Preheat broiler.
Place a 12-inch ovenproof nonstick skillet over medium-high heat. Coat pan with cooking spray. Add chopped bell pepper and mushrooms; sauté 3 minutes. Add sausage, salt, and pepper; reduce heat to medium-low, and cook for 1 minute. Combine egg substitute and half-and-half; carefully pour over sausage mixture. Cover and cook for 6 minutes. (Frittata will be slightly moist on top.) Sprinkle with cheese. Broil 1 to 2 minutes or until cheese melts. Cut into 8 wedges.

Nutritional Information

Calories per serving: 184
Calories from fat: 29%
Fat per serving: 5.9g
Saturated fat per serving: 2.5g
Monounsaturated fat per serving: 0.7g
Polyunsaturated fat per serving: 1.4g
Protein per serving: 21g
Carbohydrates per serving: 10.4g
Fibre per serving: 3.2g
Cholesterol per serving: 11mg
Iron per serving: 3.7mg
Sodium per serving: 588mg
Calcium per serving: 154mg

Frittatas are a good way to get a variety of nutrients. Eggs and cheese are a great source of calcium and protein. Mix in veggies to get an antioxidant kick as well as fibre. Fat-free cheese is a healthy alternative, especially because there is fat in the eggs and sausage.



APPLESAUCE PANCAKES

Trading butter for applesauce is a healthy way to cut out excess fat and still enjoy the sweetness of pancakes.

Ingredients

- 1 cup all-purpose flour

1 teaspoon baking soda

$\frac{1}{8}$ teaspoon salt

2 tablespoons toasted wheat germ

1 cup nonfat buttermilk
- $\frac{1}{4}$ cup unsweetened applesauce

2 teaspoons vegetable oil

1 large egg, lightly beaten

Cooking spray

Sugar-free maple syrup (optional)

Fresh fruit slices (optional)

Applesauce Pancakes - Yield: 10 servings (serving size: 1 pancake)



***T**hese diabetes-friendly pancakes are low in fat and easy to make. Serve with fresh fruit to make it more filling, or add fruit right into the batter. For a heart-healthy whole wheat option, use whole wheat flour.*

Preparation

Combine the first 4 ingredients in a medium bowl; make a well in the center of the mixture. Combine buttermilk and the next 3 ingredients. Add the buttermilk mixture to the dry ingredients, stirring just until the dry ingredients are moistened.

Heat a nonstick griddle or nonstick skillet coated with cooking spray over medium heat. For each pancake, pour $\frac{1}{4}$ cup batter onto hot griddle, spreading to a 5-inch circle. Cook pancakes until tops are covered with bubbles and edges look cooked; turn pancakes, and cook other side.

Serve with maple syrup and fresh fruit, if desired (syrup and fruit not included in analysis).

Tip: One tablespoon of sugar-free maple syrup has 8 calories and 3 grams of carbohydrate.

Nutritional Information

- ♦ *Calories per serving: 74*
- ♦ *Calories from fat: 0.0%*
- ♦ *Fat per serving: 1.8g*
- ♦ *Saturated fat per serving: 0.4g*
- ♦ *Monounsaturated fat per serving: 0.0g*
- ♦ *Polyunsaturated fat per serving: 0.0g*
- ♦ *Protein per serving: 3g*
- ♦ *Carbohydrates per serving: 11.5g*
- ♦ *Fiber per serving: 0.6g*
- ♦ *Cholesterol per serving: 22mg*
- ♦ *Iron per serving: 0.0mg*
- ♦ *Sodium per serving: 143mg*
- ♦ *Calcium per serving: 0.0mg*



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Early detection is essential to prevent loss of sight through diabetes related eye diseases

Diabetes is the leading cause of sight loss with 1.8 million out of the 37 million blind people in the world suffering blindness because of diabetes. At Moorfields Eye Hospital Dubai, located in Dubai Healthcare City, our highly qualified Consultant Vitreoretinal and Medical Retina team specialise in the detection and treatment of eye diseases caused by diabetes. If you have diabetes, or any history of diabetes in your family, it is absolutely essential to be seen early. The earlier diabetic retinal changes are detected, the easier it will be to treat them and preserve your vision.

Please contact us today for a screening by calling +971 4 429 7888 or visiting www.moorfields.ae



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IN DIABETES MANAGEMENT



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