

alseha

Issue 06, September–November 2014

Putting a focus on health in Qatar

The hidden sugar in your soft drinks



Fruit and vegetables: Are you consuming your five-a-day?

Children's diabetes: Symptoms, diagnosis and management

Weight loss tips that really work

Keeping your children safe on Qatar's roads

Plus regular features:

- Local and international health news
- Ask the experts
- Health by numbers
- Food profile



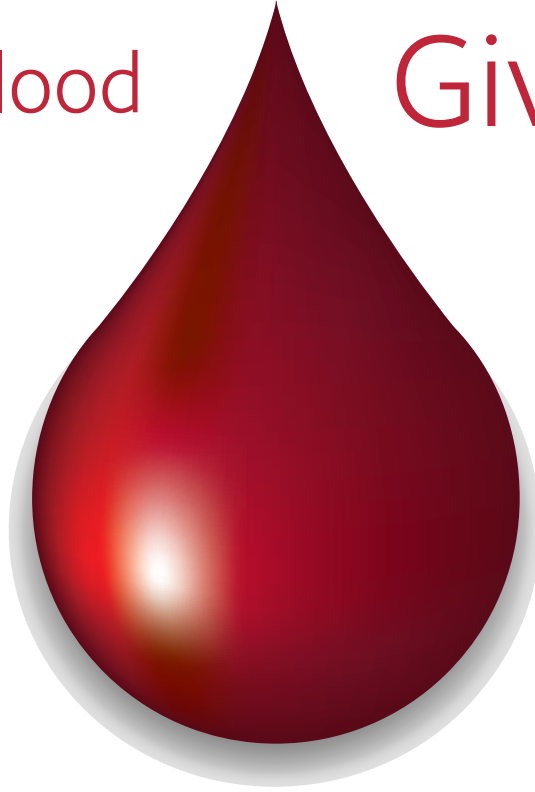
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Welcome to issue six of *Al Seha* magazine!

A person's health really is their most valuable asset, and taking responsibility for our health and making the right decisions is something we should all give serious thought to. I'm always delighted to bring you the latest issue of *Al Seha*. We continually strive to ensure every issue is filled with high quality, informative and trustworthy articles. We hope each issue offers an opportunity for everyone to take something positive and use it to improve their health.

In this issue we feature a number of important nutrition topics, including the high amount of sugar found in many drinks and the importance of consuming enough fruit and vegetables to help you stay healthy. We also meet Hamad Medical Corporation's Dr. Mohammed Al-Darwish, to discover important facts about teeth, and how to look after them. As well as all of this, you can keep up-to-date with the latest health stories with our news round-ups.

As always, if there is a specific topic you would like us to feature, please do let us know by contacting us at alseha@hmc.org.qa

On behalf of the editorial team I hope you enjoy this latest issue and look forward to reading your comments.

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Paralyzed men move again with spinal stimulation



Doctors in the United States have enabled four paralyzed men to control movement of their legs for the first time in many years through the use of electrical stimulation. Movement included flexing of the toes, ankles and knees, though the men were unable to stand or walk independently. The breakthrough,

reported in the journal *Brain*, suggests electrical stimulation may make the spinal cord more receptive to messages sent from the brain.

The spinal cord is a pathway for many messages sent from the brain to other parts of the body. When this pathway is

damaged, or blocked, these messages cannot get through, resulting in paralysis of parts of the body below the affected section of the spinal cord.

While electrical stimulation did not actually repair the spinal cord, researchers found the stimulation produced many benefits, including increased muscle mass and improved control of bowel and bladder function.

Dr. Mark Bacon, Director of Research at the charity Spinal Research, said: "The fact that paralyzed patients with some preserved sensation can regain a degree of voluntary control when receiving electrical stimulation to the cord is amazing."

Many fast food meals contain an entire day's recommended salt intake, study claims

Researchers from the University of Sydney's George Institute for Global Health studied salt levels over a three year period in menu items from six large fast food chains: Pizza Hut, Hungry Jack's, KFC, McDonald's, Subway and Domino's Pizza. They found that despite salt levels reducing by two to three percent each year, many single servings still contained an adult's entire recommended daily intake of salt. Notably, researchers stressed that the gradual reduction of salt may not equate to health benefits due to increasing portion sizes.

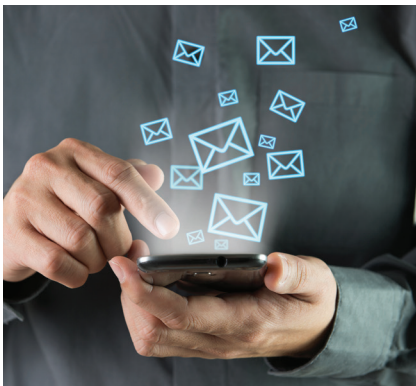
According to the study, the average Australian consumes nine grams of salt each day, more than double the recommended level. High salt intakes are linked to high blood pressure and an increased risk of heart attack and stroke.

Elizabeth Dunford, senior author of the study, stressed the dangers of high salt intake, often referred to as a 'silent killer':

"People automatically see that they get fatter if they eat too much fat or too many calories. But salt is not really thought of and it's hidden in so many places like breads, cereals, processed meats and sauces."



Diabetics in Senegal receive health advice via text messages during Ramadan



In an effort to increase awareness about diabetes and avoid related complications associated with fasting during Ramadan, Senegalese health authorities encouraged people with diabetes, as well as the general public, to sign up for its mDiabetes service. mDiabetes has been set up under 'Be He@lthy Be mobile', a joint global initiative by the World Health Organization and the International Telecommunication Union.

Each year throughout Ramadan health authorities in Senegal, as with many other parts of the world, see a rise in urgent hospitalization of people with uncontrolled diabetes. Health messages sent under the service included:

- Drink one liter of water every morning before you begin fasting.
- Take care not to overeat and watch out for foods high in sugar such as dates.
- Ask your doctor to adapt the dose and timing of your diabetes medication before you fast.

Launched in 2013, 'Be He@lthy Be mobile' is also working on an mCessation tobacco program in Costa Rica, an mCervical cancer program in Zambia and has plans to roll out mHypertension and mWellness programs in other countries.

Children's first few years greatly influence their long-term tastes



A four-year study looking into the eating habits of children aged between six months and six years highlighted the importance of introducing children to fruits and vegetables at an early age.

The HabEat project is a multi-disciplinary Pan-European study of how food habits

are formed in children and was initiated by 11 partner organizations from five European countries.

Researchers advised parents to introduce only one new fruit or vegetable per meal, and highlighted the importance of parents leading by example and encouraging their child to try new foods, without forcing them.

Other notable findings were that children may need to try a new food up to ten times before they finally accept and like the taste, and that older children were more willing to try new foods if they were involved in the cooking process.

Water only with meals could combat child obesity



A group of UK nutrition scientists has recommended parents give their children only water to drink with meals in an effort to reduce and prevent obesity. The experts claim people have got 'out of the habit' of drinking water, instead opting for sugary drinks containing 'empty calories' (calories with no nutritional value).

Professor Tom Sanders, Head of Diabetes and Nutritional Sciences Division at King's College London, said: "Kids should get into the habit of drinking water. The problem is people don't drink water anymore. I think families should put water on the table, not pop, which should be a treat."

The World Health Organization recently tightened its recommendations on sugar intakes. Earlier this year draft guidelines reinforced messages that sugars should constitute no more than ten percent of energy intake and that people should be aiming for just five percent.

Raise tobacco taxes to save more lives, says World Health Organization



The World Health Organization (WHO) has called on countries to increase tobacco taxes in an effort to encourage smokers to quit and prevent people taking up the habit. Using data from 2012, the WHO estimates that a 50 percent rise in tobacco taxes in all countries would reduce the number of smokers by 49 million within three years, resulting in 11 million fewer deaths.

According to the WHO, someone dies from tobacco-related causes every six seconds and tobacco kills up to half of its users.

"Price increases are two to three times more effective in reducing tobacco use among young people than among older adults. Tax policy can be divisive, but this is the tax rise everyone can support. As tobacco taxes go up, death and disease go down," says Dr. Douglas Bettcher, Director of the Department for Prevention of Noncommunicable Diseases at the WHO.

France has already benefited from increasing its tobacco taxes. Between 1990 and 2005 France tripled its inflation-adjusted cigarette prices, resulting in sales falling by more than 50 percent and a reduction in the number of young men dying from lung cancer.

Vitamin D deficiency linked to high blood pressure



Insufficient vitamin D levels are commonly associated with poor calcium absorption, contributing to bone issues including osteoporosis. But now a recent study claims vitamin D deficiency may also be linked to high blood pressure. The findings of the study, published in *The Lancet Diabetes and Endocrinology*, suggest vitamin D supplements could be given to people with hypertension (high blood pressure).

Professor Elina Hyppönen, the study's lead researcher, said: "In view of the costs and side effects associated with antihypertensive drugs, the potential to prevent or reduce high blood pressure and therefore the risk of hypertension with vitamin D is very attractive".

The study assessed genetic variations affecting vitamin D levels and measured them against blood pressure levels. Genetic data records were studied from more than 100,000 individuals of European ancestry from Europe and North America.

The findings showed a clear correlation between vitamin D levels and the incidence of hypertension – for each 10 percent increase in vitamin D levels there was an 8.1 percent reduction in the odds of developing hypertension.

Thembi Nkala, from the British Heart Foundation, which part funded the study, said: "This large study brings to light another potential cause of high blood pressure, which is an impressive progression in the medical field. More studies are necessary though to better understand and confirm this link between low vitamin D levels and high blood pressure. There are lots of simple ways to manage your blood pressure levels including cutting down on salt, keeping physically active, maintaining a healthy body weight, keeping alcohol within recommended limits and avoiding stressors where possible."

UK doctors vote to ban sale of cigarettes to anyone born after the year 2000



Doctors from the British Medical Association (BMA) have overwhelmingly voted in favor of banning cigarette sales to people born after the year 2000. The BMA was a key player in the implementation of the UK's 2002 ban on smoking in public places and also the 2011 ban on smoking in cars carrying

children. The BMA will now lobby the UK government to introduce the sales ban to people born after the year 2000.

Tim Crocker-Buque, a Specialist Registrar in public health medicine, who proposed the motion, said: "Smoking is not a rational, informed choice of adulthood. Eighty percent of smokers start as teenagers as a result of intense peer pressure. Smokers who start smoking at age 15 are three times as likely to die of smoking-related cancer as someone who starts in their mid-20s."

Opponents of the motion argue the ban is a step too far, and that the priority should be to enforce existing laws prohibiting the sale of cigarettes to children.

Eating fish once a week boosts brain function



Consuming baked or broiled fish just once a week is good for the brain, regardless of the amount of omega-3 fatty acid it contains. This is the conclusion of a recent study by researchers at the University of Pittsburgh School of Medicine.

"Our study shows that people who ate a diet that included baked or broiled, but not fried, fish have larger brain volumes in regions associated with memory and cognition," said senior investigator James T. Becker, Ph.D. "We did not find a relationship between omega-3 levels and these brain changes, which surprised us a little.

It led us to conclude that we were tapping into a more general set of lifestyle factors that were affecting brain health of which diet is just one part."

The findings have been welcomed by mental health researchers who believe

healthy lifestyle factors play a key role in the prevention of many conditions including Alzheimer's disease.

The research team studied data from more than 250 people who supplied details about their eating habits. Researchers then analyzed high resolution MRI brain scans of each of the study participants. Those who ate baked or broiled fish at least once a week showed higher grey matter volumes in areas of the brain responsible for memory and cognition, but no significant link was found between brain variations and blood levels of omega-3 acids.

"This suggests that lifestyle factors, in this case eating fish, rather than biological factors contribute to structural changes in the brain," Dr. Becker noted

Lack of natural light in the office leads to low productivity, poor health and wellbeing

The benefits of natural sunlight on health have been highlighted repeatedly in studies and new research has now shown that working in an environment lacking natural sunlight can not only impair your output levels but also harm your health.

The study, carried out by researchers at Northwestern Medicine and the University of Illinois, US, reports that office workers exposed to high amounts of sunlight at the office experience better sleep duration and quality, more physical activity and better overall health compared to office workers with little sunlight exposure.

Workers with windows in their office received 173 percent more white light exposure during work hours and slept an average of 46 minutes more each night than people with no natural light exposure in the workplace, according to the study published in the Journal of Clinical Sleep Medicine.

"There is increasing evidence that exposure to light, during the day, particularly in the morning, is beneficial to your health via its effects on mood, alertness and metabolism," said senior study author Phyllis Zee, M.D., a Northwestern Medicine neurologist and sleep specialist.

Co-lead author Mohamed Boubekri said: "Workers are a group at risk because they are typically indoors often without access to natural or even artificial bright light for



the entire day. The study results confirm that light during the natural daylight hours has powerful effects on health."

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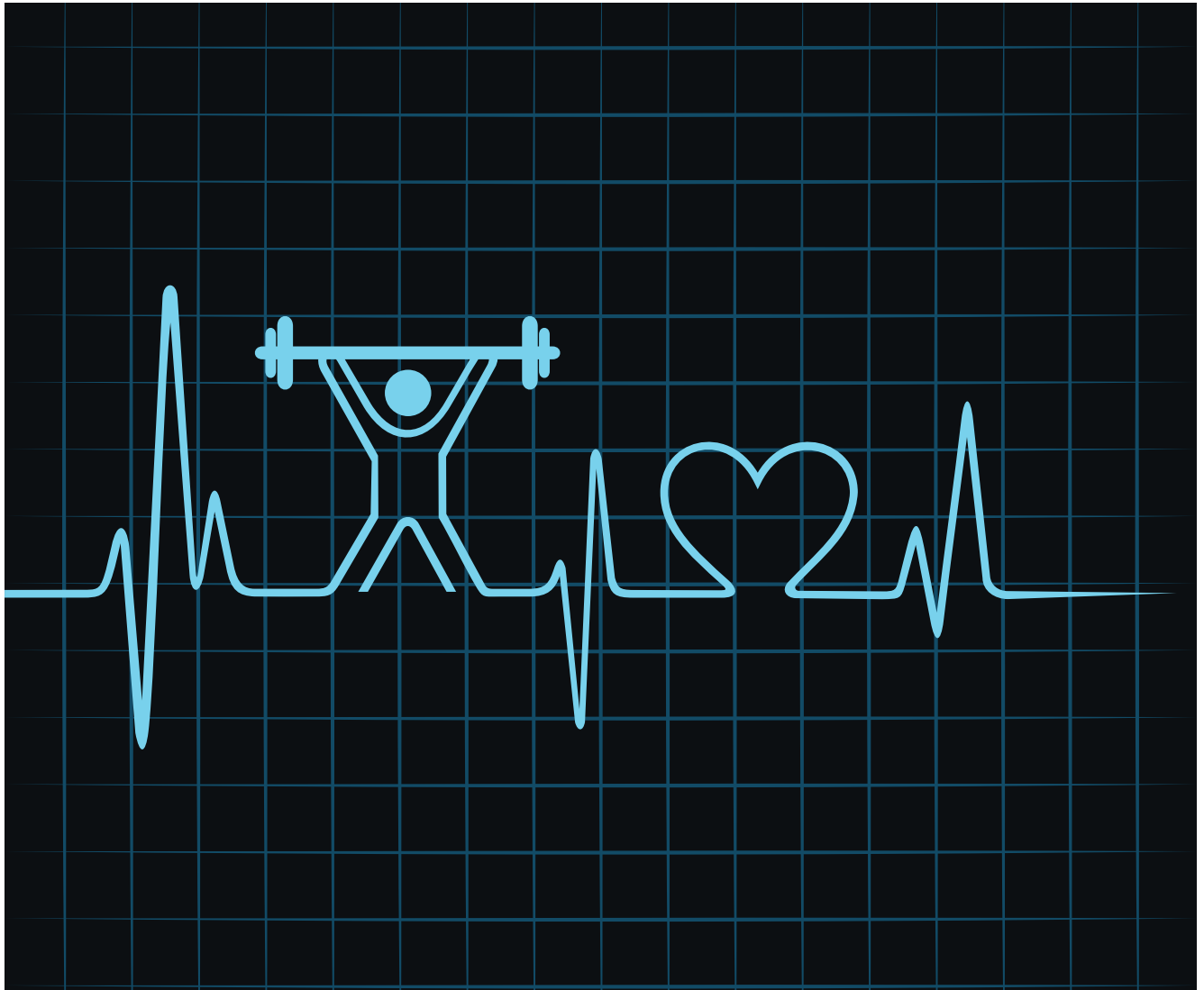
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Guide to the best fitness classes



Each year it seems there's a new fitness craze. One that is, of course, better than anything ever before and is guaranteed to get you amazing results, quickly. There are so many classes on offer that it can be hard to know which ones are best for you. In this article, *Al Seha* looks at a few of the most popular gym classes and explains the benefits.

Circuit training



For a workout that combines cardiovascular and resistance training, it's hard to beat circuit training. Circuit training involves performing high

repetition resistance exercises with short recovery times. The use of resistance exercises develops muscle tone and muscular endurance, while the high intensity pushes the heart to its maximum. The exercises are often a combination of body weight resistance movements, such as press ups and star jumps, and exercises using free weights. A typical class may involve 90 seconds of activity on eight to ten exercise stations, with a short

rest period between each exercise. The number of times the circuit is completed will depend on the intensity of each particular class. Circuits can be high intensity and physically demanding, but do not be put off if you are a beginner. If you pace yourself and are aware of your own fitness levels, you will quickly get into the feel of the classes and be able to push your body hard, without exhausting yourself before the class has barely begun. 'Bootcamp' training sessions and 'Crossfit' are both variations on the basic circuit training concept.

Verdict

A fantastic total body workout, using high tempo resistance exercises that helps build and tone muscle, while also burning fat.

Bodypump



These classes use weights to tone and build muscular endurance. 'Bodypump' is a toning and conditioning class with weights and is for just about everybody who wants to add strength training into their aerobic workout. Using a combination of exercises performed with barbells and dumbbells, you'll follow the routine of the instructor. As with all modern exercise classes, motivational music will help you get through the tough parts of the workout. If you are new to weight training techniques, you'll need to have an introductory session to learn the correct form. And don't fall into the trap of trying to begin with weights that are too heavy; bodypump classes generally involve very high repetitions, and what can seem like a manageable weight at first, can quickly feel like a dead weight.

Verdict

This class, popular with both men and women, is fantastic for toning muscle, while also burning calories.

Boxercise/Kickboxing



As their names suggest, these classes comprise boxing and martial arts moves. Due to the somewhat aggressive nature (though no one actually gets

hit!) of the classes, these classes are particularly popular with people who like a very physical workout, and they're great at helping to release built up aggression. A typical class will begin with a warm up, introducing some of the moves, then progress onto a session using punching and kicking moves. The main part of the class will use combinations of moves, to keep your heart rate up and your muscles working hard. Boxercise classes can be great fun and very rewarding, but be warned, you're in for a tough workout!

Verdict

Top class for releasing built up aggression and relieving stress!

Spinning



Spinning was first introduced to gyms in the 1990s and is still one of the most popular classes. The classes use specialized static bicycles

to provide a fast paced, fun session that gives a great workout for the legs. Classes usually last around 45 minutes, during which participants are guided through the workout by the instructor. Motivated by carefully chosen music, riders are taken through a gentle warm up, after which the session becomes a virtual ride, imitating hills, sprints and interval training. The great thing about spinning classes is that

the level of intensity can be controlled by the individual. The resistance control is available for you to adjust and no one else is able to tell exactly how much resistance you have at anytime. Therefore, if you are really struggling and need to take it a little bit easier for a few minutes, you can loosen the resistance and get your breath back. Spinning is one of the best exercises for developing cardiovascular fitness and the classes can be fun and enjoyable, as well as hard work!

Verdict

The ultimate calorie burning workout, and pedaling in time with the music makes the class fly by.

Zumba



Zumba Fitness describes itself as 'a global lifestyle brand that fuses fitness, entertainment and culture into an exhilarating dance-fitness sensation!' Zumba combines Latin beats with easy-to-follow dance moves to give a high tempo calorie-burning workout. Zumba was created by Columbian Alberto Perez, and incorporates many Latin dance moves like salsa, cha cha and hip-hop. Zumba's appeal has spread globally in the past few years, largely thanks to its fun and energetic nature. The dance moves are relatively simple and there are generally only three or four moves per song, so it's easy to learn and requires little dance experience. Zumba is typically done in large groups so if you enjoy exercising with other people then this is definitely one for you to try.

Verdict

It's a great workout for people who enjoy dancing and Latin beats. 14,000,000 people in 185 countries are testament to its benefits.

Walk your way to health

Many forms of exercise can seem quite daunting when you first embark on a new exercise regime. But there's one activity offering wonderful health benefits that you're probably already doing: walking.



Health experts are constantly telling us to get active and exercise regularly, yet this doesn't have to mean signing up to a gym, or joining a structured exercise class. Walking can be done almost anywhere, alone or with friends, has a low risk of injury and doesn't require you to buy anything more than a good pair of exercise shoes. Additionally, you can fit your walking in around your daily routine.

Walking has consistently been shown to improve health, including:

- Helping maintain a healthy weight
- Lowering the risk of many conditions, including heart disease, high blood pressure and type 2 diabetes
- Strengthening bones

- Combating depression and anxiety
- Improving balance and coordination

A recent study by researchers at Lawrence Berkeley National Laboratory in California found that regular brisk walking can lower a person's risk of developing high blood pressure, high cholesterol and diabetes as much as running. The study assessed the exercise habits and health of 33,060 runners in the National Runners' Health Study and 15,045 walkers in the National Walkers' Health Study. The findings showed moderate intensity walking resulted in the same risk reduction as high intensity running. Additionally, the more regularly people walked or ran, the greater the health benefits.

The 10,000 step goal

Once you've decided to increase the amount of walking you do, it's then a good idea to set yourself a daily target. 10,000 steps a day is the figure commonly advised by health experts, but any increase on your current activity level is a good start. Many estimates state the average person walks between 3,000 to 6,000 steps a day, so for most people reaching the 10,000 step target will require a concerted effort.

The best way to walk more is to make walking part of your everyday routine. Instead of setting aside one block of time each day to try to do reach your step target, it's far better to integrate short

“ Many estimates state the average person walks between 3,000 to 6,000 steps a day, so for most people reaching the 10,000 step target will require a concerted effort. ”

periods of walking into as many daily activities as possible. For example:

- Park your car a short distance away from work and walk the remaining distance
- Walk up the stairs instead of using the elevator
- When parking at the mall, find a space at the far end of the car park and walk the additional distance
- Go for a walk with family or friends after dinner

Tracking your steps

Unless you want to spend the day counting in your head the number of steps you take, the best solution is to buy a pedometer. Pedometers are small electronic devices that clip to your belt or strap to your wrist and record the number of steps you take. Using a pedometer can be very motivating as it gives you instant feedback about your activity. Users often take great satisfaction from seeing their step targets reached on their pedometer.

A great tip for using a pedometer to increase your daily activity is to set yourself small targets to begin. For example, if your normal daily step count is 5,000, try to increase this by an additional 1,000 steps each week until you build up to 10,000 steps a day on a regular basis.

Choosing a pedometer

You may have noticed many of your friends or colleagues wearing some kind of pedometer and making the effort to walk around more than previously. Pedometers have been around for a long time, yet their popularity has soared in the past few years. It can be a challenge deciding which pedometer best suits your needs. There are hundreds of pedometers to choose from, so having some idea of what you want from your pedometer is required. Some pedometers attach to your belt, others strap on your wrist like a watch, while the data each device records also varies: steps, distance, calories, heart rate and even your sleep patterns are all measured by various devices. The more

advanced pedometers store their data and build up a record of the users' activity over a period of time, linking to a mobile app. This allows you to look back over a period of time – a week, month or longer – and review activity patterns. For advice about choosing a pedometer that best suits your needs, ask in a specialist sports store, or speak to a qualified personal trainer.



The hidden sugar in your soft drinks

Most people are aware that consuming large amounts of sugar can damage your teeth and contribute to weight gain, but it's not always easy to monitor sugar consumption. Seemingly healthy food products, such as breakfast cereals, fruit juices and ready-made sauces, frequently contain high quantities of 'hidden' sugar.



The World Health Organization (WHO) recently advised people to significantly lower their daily sugar intake. The WHO will keep its recommended daily sugar consumption at under 10 percent of total calorie intake, a figure that was set in 2002, but a new five percent target has also been encouraged. The 10 percent level equates to around 50 grams of sugar a day for the average adult; about 12 teaspoons. A recent study by researchers at the United States Centre for Disease Control and Prevention, published in the Journal of the American

Medical Association, found soft drinks were the main source of dietary sugar for Americans. Fruit juice, flavored milk, coffee and sports drinks frequently contain high levels of sugar, often to the surprise of consumers.

In this article, *Al Seha* reveals the sugar content of some popular soft drinks. When reading, remember the WHO's recommended daily intake is around 12 teaspoons of sugar a day, but they suggest you aim for just six teaspoons.



Cola

10.6 grams of sugar per 100 milliliters

35 grams of sugar per 330 milliliter can; approximately 9 teaspoons



Chocolate Low Fat Milk

10.1 grams of sugar per 100 milliliters

24 grams of sugar per 236 milliliter bottle; approximately 6 teaspoons





Orange Juice

9.1 grams of sugar per 100 milliliters

22 grams of sugar per 240 milliliter bottle; approximately 5 ½ teaspoons



Energy Drink

11 grams of sugar per 100 milliliters

27.5 grams of sugar per 250 milliliter can; approximately 7 teaspoons



Vanilla Latte

7.4 grams of sugar per 100 milliliters

35 grams of sugar per grand cup (473 milliliters); approximately 9 teaspoons



Love Your Kids?



Strap them in Keep them safe



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Weight loss tips that really work

Losing weight is not easy. Many aspects of modern day life work against us when trying to lose weight: technology that negates the need for physical exertion and the growth of the fast food industry are just two of these factors. Despite this, weight loss is achievable if it is carefully planned and approached in the correct manner. In this article *Al Seha* provides its top tips for successful weight loss.

Exercise more and eat less



Reducing your calorie intake is the key to losing weight. In its simplest terms, losing weight requires the total number of calories consumed to be less than the total number of calories burned. Trying to lose weight by concentrating on only one of these factors – eating less or exercising more – is very difficult. The most effective strategy is to eat a little less and exercise a bit more. For example, if you can increase the amount of calories you burn by 250 a day, and also decrease calories consumed by 250, then you've made a 500 calorie difference each day.

Include resistance training in your exercise plan



Increasing your muscle mass will boost your chances of successful long-term weight loss. Muscle uses calories, even when you are inactive, so adding a few pounds of lean muscle will allow you to constantly burn calories throughout the day and night.

Be active throughout the entire day



Increasing your activity levels doesn't mean you have to go to the gym every day for an hour of intense exercise. You can increase the number of calories you burn by doing small amounts of activity throughout the entire day, such as walking up the stairs instead of taking the elevator, or walking part of the journey to work.

Keep a food diary



As well as recording the foods you consume, it is worthwhile writing down the reasons why you ate each meal. For example, did you eat because you were hungry or because you were bored? Looking back on this information can be very beneficial when analyzing your weight loss progress.

Avoid calorie packed drinks



When calculating your calorie intake throughout the day it is easy to forget the drinks that you've consumed. However, sugar-filled energy drinks and calorie-packed coffees significantly contribute to your total calorie intake. As much as possible, try to drink water. If this is a little plain for you, add a squeeze of lemon juice or just a splash of fruit juice to your water to add flavor.

Control your portion sizes



Even if you make healthy food choices, it's easy to overeat at meal times. And with portion sizes of meals at restaurants increasing in recent years, particularly fast food outlets, you need to be aware of how much you are eating. Even with meals at home, don't feel that you have to finish everything on your plate. If you think you've had enough, stop!

Focus on health, not only weight loss



Spending every waking minute thinking about how many calories you are consuming can literally take over your life. Try to focus on living a healthier lifestyle and enjoy your journey to weight loss. Short-term 'fad diets' often produce immediate results, but people frequently return to their previous unhealthy habits once the diet is over. Try to find a weight loss plan that still allows you to enjoy life, and your food, so you can maintain these healthy habits for life.

Be patient



Trying to lose more than a few pounds a week is unrealistic for most people, and an unhealthy target to set. Instead, take a long-term view of your weight loss plans. If you are losing just a small amount of weight each week then that's fine – it doesn't matter how much weight you lose as long as you are constantly losing.

Eat slowly



Eating slowly, and paying attention to chewing your food sufficiently, can go a long way to helping you lose weight. It takes approximately 20 minutes from the time you begin eating for your brain to send out signals of fullness. So, if you

overeat within 20 minutes, your brain is unable to send you signals to stop. Eat slowly and chew your food, which also helps to breakdown the food and increase the amount of nutrients you absorb.

Eat breakfast



You've heard it a thousand times, yet do you still think that avoiding breakfast will help you to lose weight? Eating breakfast kick starts your metabolism (which burns calories in your body), while avoiding breakfast has been shown time and again to lead to more calories being consumed throughout the rest of the day. If time is a restriction, try making a healthy smoothie with fruit, nuts, seeds and milk, for a quick and balanced breakfast.

Be prepared



In general, people make the worst food choices when they are not prepared. Typically, this means when you have no food at home and order a take away, or when you go out for the day with no plans for food and end up grabbing a quick unhealthy snack. Plan what you are going to eat, whether at home, at work or out of the house. Always try to carry a small snack with you; nuts, seeds and fruit are great options. This will take the edge off any hunger you have and give you a bit of extra time to find a healthy food choice.

HMC campaign raises public awareness of diabetes



**Move away
from diabetes.**

At the start of the summer Hamad Medical Corporation (HMC) launched a diabetes campaign to raise public awareness about the condition, educate people with diabetes on how best to manage their disease and explain how a healthy lifestyle can help prevent type 2 diabetes.

The campaign will build on the recent progress made by HMC in the provision of care for people with diabetes, the highlight of which was the opening of the new National Diabetes Center in July 2013 at Hamad General Hospital. The center provides improved patient care and better access to specialized services for Qatar's diabetic population, and brings together diabetes and related disciplines and services in one place.

Diabetes is one of the most pressing health burdens in the Arabian Gulf. Approximately 20 percent of the Qatari adult population has diabetes. Despite its prevalence in Qatar, diabetes is not well understood here. There are widespread misconceptions about what causes the disease and many people have little knowledge about diabetes and the importance of healthy lifestyle choices.

Phase one of the campaign aimed to create general awareness of the disease, its signs, symptoms and consequences and provide information on healthy living during Ramadan, including tips for healthy fasting.

For more information on diabetes in Qatar visit <http://diabetes.hamad.qa/en>

Obesity the recent focus of Weill Cornell Medical College's health campaign



Throughout Ramadan obesity was the subject of a health promotion campaign run by Weill Cornell Medical College in Qatar (WCMC-Q). Sahtak Awalan – Your Health First campaign is a five-year initiative run in conjunction with the Supreme Council of Health aiming to promote healthy living to people in Qatar.

To raise awareness of obesity-related issues, the campaign ran radio and television programs as well as photo competitions, with dietitians available in malls to offer advice to people on how to manage their weight.

Dr. Abdulwahed Zainel, a Qatari graduate of WCMC-Q, said: "We all know that poor lifestyles and obesity are serious problems in our society and that we need to do more to live healthier lives. Small steps can lead to great strides and what better time to make those small changes in your life than the Holy Month. This year we focused on healthy eating and the benefits of six major food groups."

For more information on the campaign visit www.facebook.com/SahtakAwalan

Dermatologist highlights the importance of checking for signs of skin cancer



Residents of Qatar, a country with a high number of sunlight hours each year, should give particular importance to the early signs of skin cancer, according to Dr. Haya Al Mannai, Dermatology Consultant at Hamad Medical Corporation.

Skin cancer is the abnormal growth of skin tissues, which is most commonly caused due to the skin's prolonged exposure to the sun's rays. "The most common cause of skin cancer is exposure to the ultra violet radiation in sunlight. Although anyone can be affected by skin cancer, people with fair and lighter skin and those with a family history of skin cancer are at a higher risk of developing the disease," Dr. Al Mannai stressed.

She advised the public to regularly check for any abnormal growths on their body, saying: "The first signs usually include a growing bump, a changing mole or a scaly,

dry and rough patch. When detected early, the cancer can be controlled and treated effectively, with an increased chance for the person to be cured."

"It is extremely important to check all the skin, including the back, soles of feet, between fingers and toes and under the nails. People should also regularly check the skin for any changes, using a mirror, especially in patients who have multiple moles. If any change is noticed the person should seek medical assistance and get a referral to see the doctor," Dr. Al Mannai said.

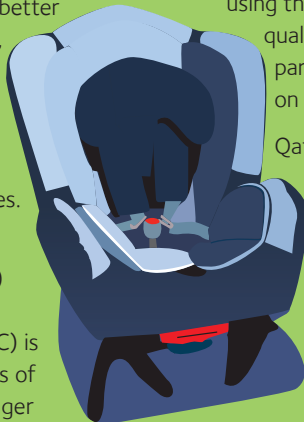
If any unusual spots are observed on the skin, the first step should be to visit the nearest health center for a check-up and in case of any suspicion the doctor will refer the patient to a dermatology department for more evaluation.

Become a Child Passenger Safety Technician and help make Qatar a safer place

Children's health and safety in Qatar is a growing concern, and rightly so. The cliché 'prevention is better than cure' rings true, especially when it comes to children. One of the factors to consider is safety in and around vehicles.

Hamad Medical Corporation's (HMC) Hamad International Training Center (HITC) is in a continual process of training Child Passenger Safety Technicians.

These certified technicians, many of whom work for HMC, recognize the



importance of using child car seats and have been trained in the intricacies of using these safety devices correctly. Once qualified, events are arranged where parents and child-minders are guided on child car seat selection and use.

Qatar now has two Child Passenger Safety Technician Instructors, both HMC employees. Mark Roxburgh, a Critical Care Paramedic with the Ambulance Service, and Dr. Rafael Consunji, Injury Prevention Director, are both passionate about preventing injuries and deaths due to road traffic incidents.

"There is nothing more important than reducing preventable injuries and deaths

among children on Qatar's roads. I'm proud to be a qualified Child Passenger Safety Technician Instructor, and am passionate about passing on my knowledge and teaching parents and child carers how to protect their children," said Mark Roxburgh.

If you would like to organize a Child Passenger Safety event, or bring your vehicle, car seat and child to an event, or if you would like to become a certified Child Passenger Safety Technician (a three-day course), you can contact HITC for more information on the details below.

Tel: 4439 7396

Email: jgibson@hmc.org.qa

‘Kulluna for a Healthy Heart’ campaign re-launched

The Kulluna for Health and Safety initiative re-launched its successful health awareness campaign ‘Kulluna for a Healthy Heart’ during the summer at the City Center Doha and The Mall on D-ring road.

Introduced in April 2013 by Hamad Medical Corporation’s Hamad International

Training Center (HITC), and supported by its founding sponsor ConocoPhillips Qatar, the campaign aims to raise awareness about cardiovascular disease, its prevention, available treatments and lifestyle changes that promote heart health.

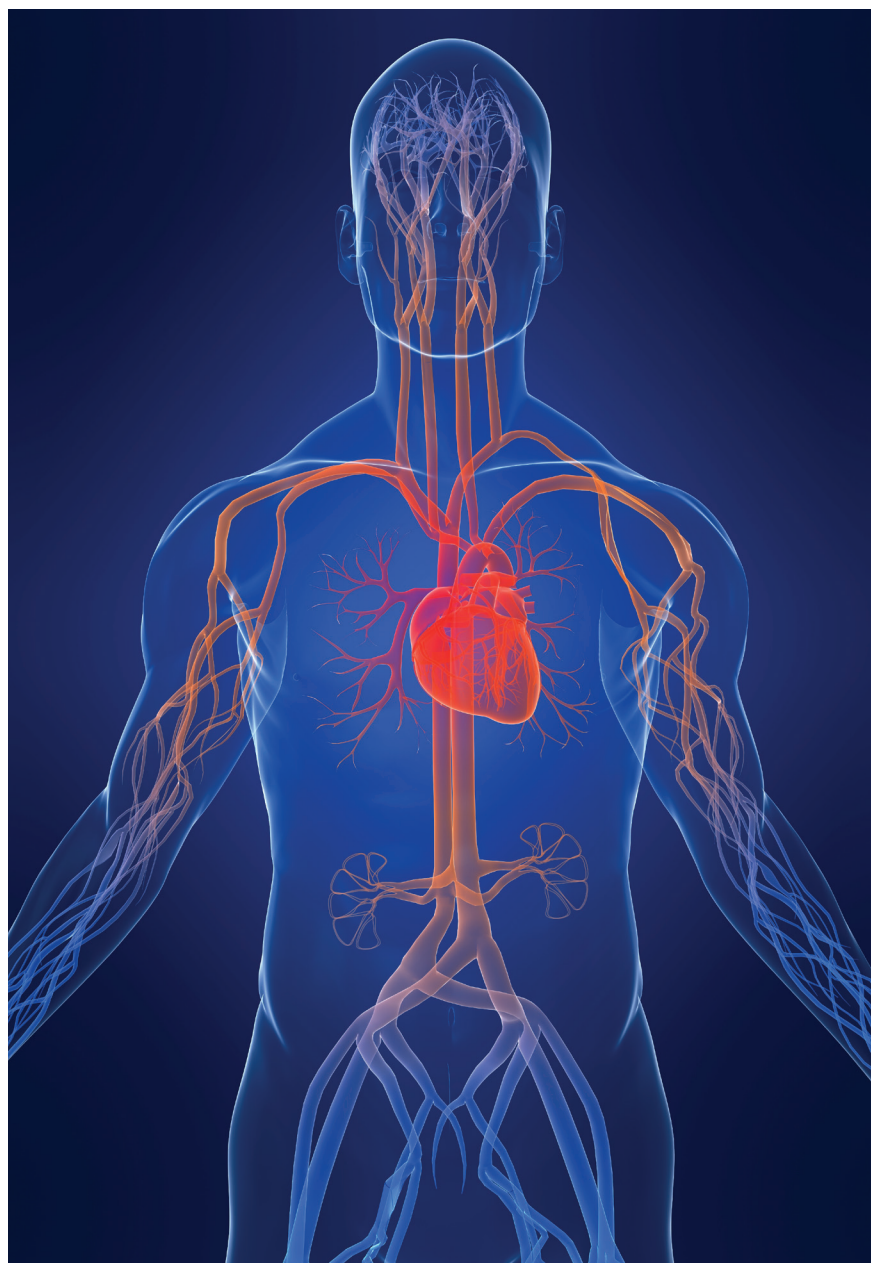
According to the World Health Organization, cardiovascular diseases are one of the leading causes of death worldwide. In Qatar, there has been an alarming increase in the number of admissions of heart attacks and heart failures in the past two years, with about 4,000 patients seen every year.

The ‘Kulluna for a Healthy Heart’ campaign focused on various preventative measures of cardiovascular diseases and highlighted the behaviors, lifestyle and risk factors that can lead to heart-related illnesses, such as smoking, obesity, high blood pressure and diabetes.

Dr. Khalid Abdulnoor Saifelddeen, HITC Director, said: “According to the World Heart Federation, cardiovascular diseases cause about 17.3 million deaths each year. Our campaign was designed to spread awareness of the importance of knowing your health status and to inform the public about how they can incorporate a healthier lifestyle.”

Gary Sykes, President of ConocoPhillips Qatar, commented: “The ‘Kulluna for a Healthy Heart’ campaign was an excellent opportunity for ConocoPhillips to reaffirm its commitment to the health of the people of Qatar. Last year’s success was a strong testament to the importance of this initiative that addresses an urgent need and falls within the strategic pillar of ‘Health and Safety’ championed by ConocoPhillips.”

To find out more about Kulluna, its campaigns and ways you can be involved, please visit <http://kulluna.hamad.qa/en>



Workshop promotes mental health issues in schools



Teachers, social workers, psychologists, support teachers and school nurses from across 20 independent schools for boys and girls recently took part in an educational workshop aimed at raising awareness about mental health and dealing with mental issues among students and teenagers.

Participants attended the workshop organized by Hamad Medical Corporation

(HMC) as part of an Academic Health System (AHS) initiative in collaboration with HMC's Psychiatry Department, the Supreme Education Council and Primary Health Care Corporation.

The aim of the workshop was to promote the concept of mental health in a school setting and enhance communication with students, as well as to highlight common mental health issues relating to teenagers by identifying the proper ways of dealing with the issues and the most suitable time for referral.

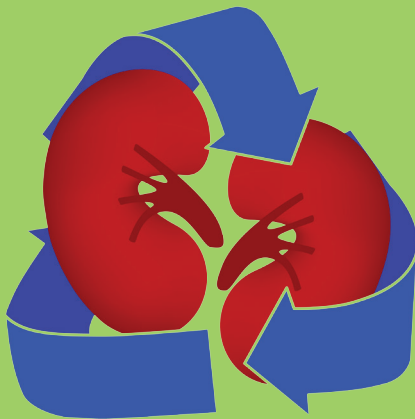
Dr. Suhaila Ghuloum, Senior Consultant Psychiatrist at HMC and Head of the AHS Medical Board, explained: "Mental illness is a health problem which significantly interferes with an individual's cognitive, emotional and social abilities and may,

in most cases, lead to a reduced ability to function or cope with normal daily life activities. Early detection and intervention helps to achieve the best treatment outcomes."

Dr. Suhaila stated that depression, anxiety and phobias are among the most common types of mental issues prevalent in Qatar, with around 50 percent of them starting to manifest in children aged 14 years.

The workshop highlighted several ways to prevent mental issues escalating, such as effective family and school support, participation in social activities and creating strong social relationships. High self-esteem and the sense of control over personal life decisions also help to build a balanced personality that is best equipped to cope with daily life requirements.

Donation campaign boosts the number of registered organ donors



Throughout Ramadan, Hamad Medical Corporation ran an extensive campaign to raise awareness of organ donation and increase the number of people on

the organ donor register. The campaign set up information booths in shopping malls and other prominent locations around the country, run by Qatar Organ Donation Center - Hiba trained staff. The public were able to find out more about being a registered organ donor, what it entails and the benefits involved, as well as registering as a donor on the spot and receiving their donor card. The campaign was a great success, resulting in many people registering as organ donors.

An organ transplant is a life-saving procedure for someone who has an organ that is failing. It can also significantly improve quality of life for people with chronic health problems. Under the Doha Donation Accord donors and their

families are looked after before, during and after donation. Living donors are provided with health insurance for life, as well as covering any loss of income due to working days missed during the operation and recovery.

As a result of the recent awareness campaigns, the number of registered organ donors has grown significantly. In August 2012, the Organ Donor Registry had 2,000 registered names, a figure that has now risen more than tenfold.

For more information on organ donation in Qatar, visit <http://organdonation.hamad.qa/en/>

Fruit and vegetables: Are you consuming your five-a-day?

Health experts regularly advise us to consume five 80 gram servings of fruit and vegetables each day, but why? The five-a-day recommendation is based on advice from the World Health Organization (WHO) following evidence that this level of intake will meet a person's nutritional requirements of vitamins, minerals, antioxidants, and fiber, and protect against ill health and diseases including cancer, heart disease, stroke and obesity.

According to the WHO, insufficient intake of fruit and vegetables is estimated to be responsible for around 14 percent of gastrointestinal cancer deaths, 11 percent of ischemic heart disease deaths and about 9 percent of stroke deaths globally.



“ Five servings of fruit and vegetables is the minimum recommendation; the more the better as far as your health is concerned.”

How do fruit and vegetables protect against disease?

Fruit and vegetables contain high levels of antioxidants; naturally occurring molecules that protect against the damaging effects of free radicals. Cells in the body constantly react with oxygen to produce energy and a natural consequence of these reactions is the production of free radicals, unstable electrons that interact with, and damage, healthy cells. You cannot totally eradicate the production of free radicals. In fact,

many factors can actually increase free radical production, including smoking, pollution and sunlight. Free radical damage contributes to the development of many diseases and speeds up the aging process. Antioxidants defend the body against free radical damage. Therefore, for optimal health, a sufficient intake of antioxidants is recommended. Fruit and vegetables are also good sources of dietary fiber, which helps maintain a healthy digestive system and can also reduce your risk of bowel cancer.

The more the better

Five servings of fruit and vegetables is the minimum recommendation; the more the better as far as your health is concerned. A recent study by University College London found that eating seven or more portions of fruit and vegetables a day would offer more health benefits than five portions, and prolong lives.

Researchers analyzed data from 65,226 people between 2001 and 2008 and looked at their general mortality as well as deaths due to cancer, heart disease and stroke. The findings conclusively showed the risk of premature death from any health-related cause decreased as consumption of fruit and vegetables increased.

Interestingly, the study found a variation in the protective effects of fruit and vegetables. The strongest protective effect was offered by fresh vegetables, followed by salad and then fruit. Lead researcher Dr. Oyinlola Oyeboode said: "The clear message here is that the more fruit and vegetables you eat, the less likely you are to die – at any age."

The Australian government recognizes the importance of consuming more vegetables than fruit and this is reflected in their 'two plus five' a day recommendation – encouraging people to consume two servings of fruit and five portions of vegetables a day.

Different nutrients are found in each type of fruit or vegetable, so it is important to consume a wide variety. As a general rule, choosing fruit and vegetables with a wide range of colors will ensure you get a good balance of vitamins, minerals, fiber and antioxidants.

“ Different nutrients are found in each type of fruit or vegetable, so it is important to consume a wide variety. ”

Achieving your target

Consuming five servings a day can be challenging for many people. Here are a few tips to help you reach, or even exceed, that target, and some suggestions for getting the most benefit:

- Get an early start on your intake by ensuring you eat one or two portions of fruit for breakfast: add chopped fruit, such as apple or banana, to breakfast cereal, or make a fresh fruit smoothie.
- Chopping a selection of fruit and vegetables and keeping them in the fridge will ensure they are always readily available.
- Add fruit to natural yogurt, with a few nuts or seeds, for a healthy and balanced snack.
- A glass of pure fruit juice counts as one of your five-a-day. However, only one glass contributes to your daily total because juice contains less fiber than the whole fruit.



- Salads don't have to be boring. Get creative with your salads and add avocado, apple, cranberries, seeds and different cheeses to create a balanced meal.
- Include fruit or vegetables in every main meal. Even if you quickly prepare a sandwich for lunch, add tomato, cucumber or avocado to boost its nutrient content.
- Making a vegetable smoothie is a great way to pack lots of nutrients into one snack or meal. Spinach, kale, watercress and broccoli all make great vegetable smoothie ingredients. Add some kiwi fruit or apple for a little sweetness if you like and you've got a great antioxidant-rich drink.
- Cooking destroys some of the nutrients in vegetables, so eat these raw where possible. Steaming vegetables protects the nutrients more than boiling. If you do boil vegetables, the water can be used in stocks, sauces or soups.
- Add vegetables to main meals where possible. For example, when making a bolognese or curry, add in chopped mushrooms and red peppers.

What does one 80 gram serving of fruit or vegetables look like?

One medium apple



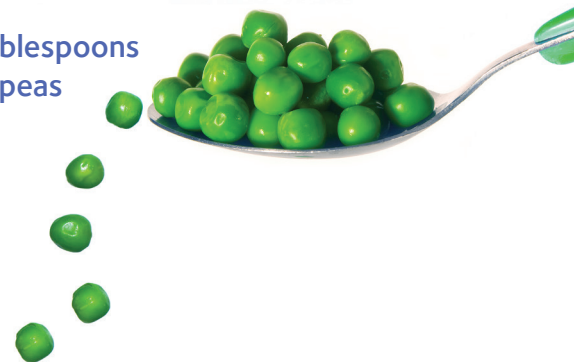
Two broccoli florets



One medium banana



Three tablespoons of peas



Seven strawberries



Tobacco use kills 5.4 million people
a year – an average of one person
every six seconds – and accounts for
one in 10 adult deaths worldwide

Tobacco kills
up to half of all users

It is a risk factor
for six of the eight
leading causes of death
in the world

There are more than 4000
chemicals in tobacco smoke, of which
at least 250 are known to be harmful
and more than 50 are known to
cause cancer

Contact the Smoking Cessation Clinic
at Hamad Medical Corporation
for advice on how to quit smoking
Tel: 4439 2778



مؤسسة حمد الطبية
Hamad Medical Corporation

HEALTH • EDUCATION • RESEARCH صحة • تعليم • بحوث

Keeping your children safe on Qatar's roads



Five must-read facts

Road safety issues are never far from the headlines in Qatar. Mobile phone use, speeding, tailgating and failure to wear a seat belt are just some of the issues contributing to the needless loss of children's lives on Qatar's roads. Using data on children up to the age of 18 years, admitted with road traffic injuries from 2010 to 2012, the Hamad Injury Prevention Program and the Clinical Research Unit of the Trauma Surgery Section at Hamad General Hospital have put together these startling facts that will make you act now to improve the road safety of your children.

1. Qatar's leading cause of death.

Road traffic injuries (RTIs) are the number one cause of death in Qatar. RTIs cause more deaths than cancer, heart disease, obesity or diabetes.

2. Most child deaths on Qatar's roads happen before they reach the hospital.

86 percent of children who died from RTIs in Qatar (2010–2011) died at the scene because their injuries were so severe they did not survive. These lethal injuries could have been prevented and avoided through the proper use of seatbelts and/or car seats.

3. Young Qatari men are most at risk.

- Road traffic injuries are responsible for nearly 70 percent of all deaths among Qatari males aged 10 to 19 years old (2010–2011).
- Between 2010 and 2012, 87 percent of children who died in the hospital as a result of a road traffic injury were teenagers.
- Motor vehicle crashes are the leading cause of hospital admission for trauma for children between 10 and 18 years of age.
- 40 percent of child road traffic injury victims were aged 15 to 18 years old.
- 50 percent of young drivers who died in the hospital were below the legal driving age.

4. The road traffic injury risk follows an age-dependent pattern.

- 25 percent of victims less than one year of age admitted to hospital did not survive their injuries. None of

this age-group was travelling in a car seat.

- People aged 10 to 14 years old were most commonly injured as all terrain vehicle or bicycle riders (42 percent) or passengers (39 percent). One in six people admitted to hospital, aged 10 to 14 years old, was driving a car at the time of injury.
- Forty two percent of injured 15 to 18 year olds were drivers; with one in twelve not surviving their injuries.

5. The evidence supporting the use of seat belts and child restraints (or car seats) is indisputable.

- In 2011, all children aged 0 to 4 who died in a motor vehicle crash were unrestrained front seat passengers. Not one death occurred for children of this age when travelling as restrained rear seat passengers.
- Only 1.2 percent of passengers and drivers admitted to hospital were using a seatbelt or a car seat. Those who were in seatbelts or in car seats did not suffer injuries or, if injured, did not have injuries that needed to be seen at the hospital.

Minimizing the risk

While it may seem impossible to completely prevent crashes from happening, there are many simple steps people can take to reduce their risk of being injured if they are involved in a crash on Qatar's roads. In particular, there is one simple action that can make a major difference. This step will determine if you and your children have to simply pull off the road to wait for the police or if you are all severely injured, or are faced with a death in the family. "Wearing a seat belt is the single most significant action you can take to protect yourself. The use of seat

belts is proven to reduce the risk of death or serious injury in a crash by almost 50 percent for both drivers and front seat passengers, and about 25 percent for rear seat passengers. Every passenger, on every journey, must be restrained when travelling in a vehicle. Placing children in age-appropriate car seats, or at the very least restrained in the back seat of vehicles, will go a very long way to preventing severe injury and death. For children under the age of 12, the front seat is the most dangerous place to be," explains Dr. Rafael Consunji, Hamad Medical Corporation's Injury Prevention Director.

The Hamad Injury Prevention Program's top road safety tips:

- Wear a seat belt at all times when travelling in a motor vehicle
- Don't drive under the influence of alcohol or drugs
- Drive within the speed limit
- Adjust your driving to suit extreme weather conditions
- Don't use your mobile phone while driving
- Don't drive if you are tired or drowsy
- Keep a safe distance away from the car in front
- Be aware of other road users' behavior
- Provide adequate adult supervision and be a positive role model for all the young drivers you know, do not allow under-aged drivers to drive unsupervised

Taking care of your teeth

Al Wakra Hospital's Dr. Mohammed Sultan Al-Darwish highlights the most pressing oral health issues and answers questions on this important health topic.



Can you tell us a little bit about your background and role at HMC?

I gained my Bachelor's Degree in Dental Medicine and Surgery from Egypt's Alexandria University in 1998, and in 2004/5 I continued my skills development with a Certificate of Prosthodontics and Master's Degree in Oral Science from the University of Illinois at Chicago. In 2014, I obtained a PhD in Dental Public Health from the University of Gloucestershire, UK. Currently, I serve as a Consultant Prosthodontist at the Department of Dentistry, Al Wakra Hospital, and as President of the Qatar Dental Society.

What do you consider to be the most pressing oral health issues on Qatar?

Dental caries (tooth decay or cavities) is the leading oral health issue affecting children in Qatar. 85 percent of children between 12 and 14 years of age have dental caries. This is the second highest prevalence in the Gulf region, exceeded only by Saudi Arabia.

“ Acid can damage your teeth in the same way as sugar, so diet drinks with no sugar, but containing acid, can contribute to tooth decay. ”



What steps can people take to prevent tooth decay?

If you have a sensible diet that is low in sugar, a regular cleaning routine and sufficient fluoride, your teeth are unlikely to be affected by decay. The following steps can also help prevent decay:

- Limiting your intake of sugary food and drinks, or those with high levels of acidity. Acid can damage your teeth in the same way as sugar, so diet drinks with no sugar, but containing acid, can contribute to tooth decay.
- Brushing and flossing your teeth carefully to reduce the amount of bacteria on their surfaces.
- Using fluoride toothpaste. This will make the surfaces of teeth more resistant to acid. The fluoride in

our water supply strengthens the developing teeth of infants and children.

- Visiting your dentist on a regular basis for cleaning and maintenance.

There are so many toothpastes to choose from; how do we know which one to use?

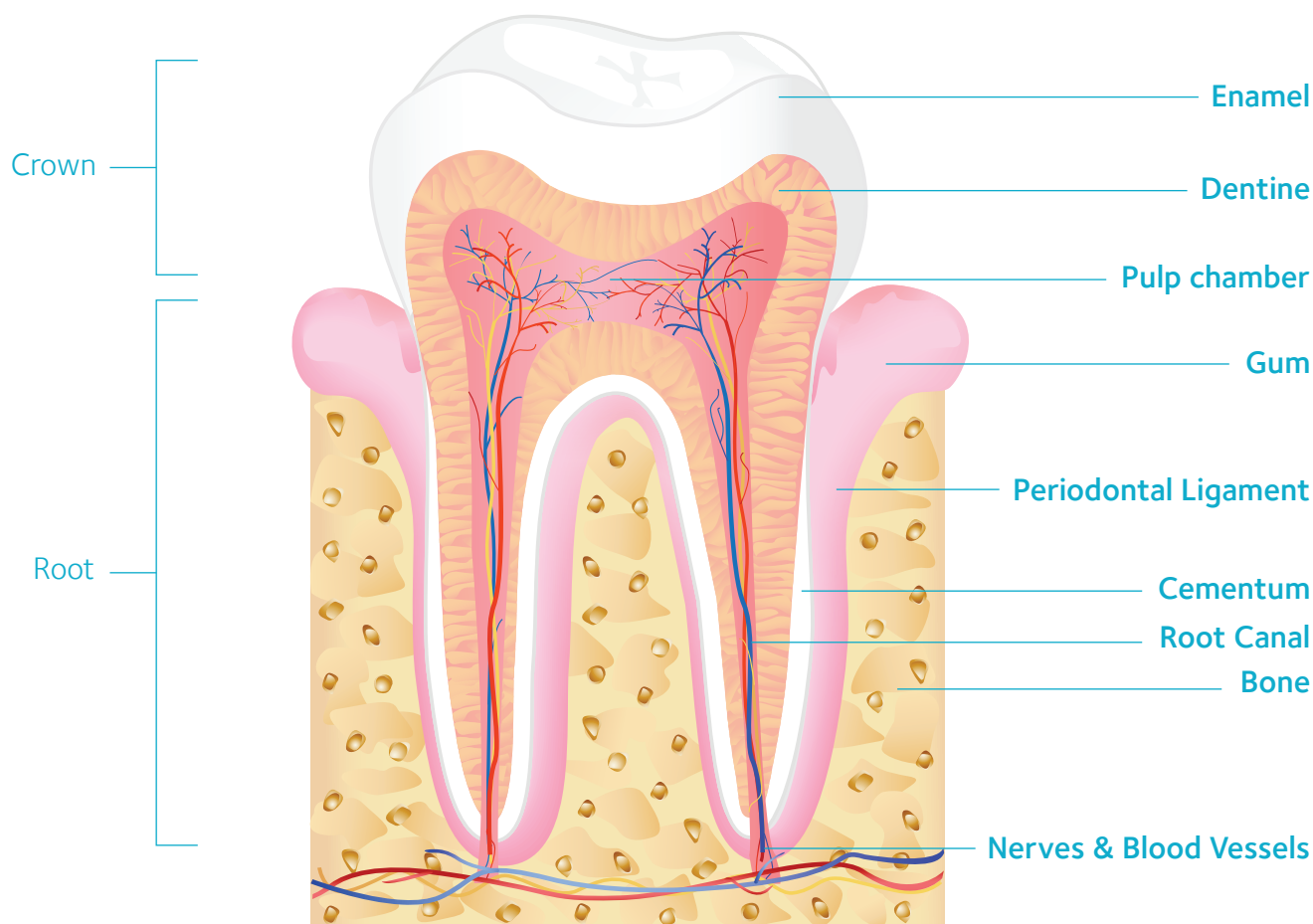
Firstly, when purchasing toothpaste for you or your child, be sure to select one that contains fluoride. Fluoride-containing toothpaste has been shown to prevent cavities. However, check the manufacturer's label as some toothpastes are not recommended for children under six years of age. This is because young children may swallow toothpaste and

this can lead to tooth discoloration in permanent teeth.

Next, when considering other properties of toothpaste, such as whitening, tartar-control, gum care or desensitizing, the best advice is to ask your dentist which product is most suitable for your teeth.

How often and for how long should we brush our teeth?

You should brush your teeth at least twice a day. Remember it is important to have the right brushing technique as poor techniques can cause harm to the teeth and gums. Correct brushing should take two to three minutes.



Is brushing alone enough?

No! Good brushing is very important to help prevent dental decay and periodontal disease, however brushing alone is not enough. It is also very important to clean between your teeth. This is why flossing is so important.

How important is diet in preventing and treating dental caries?

Limiting your intake of sugary food and drink is the best way to prevent and treat dental caries. Notably, how frequently you consume sugary food and drinks is more important than the total amount of sugar

you consume. For example, it is better to have 20 grams of sugar in one intake, than a total of 15 grams of sugar in three separate intakes. This is because every time your teeth are exposed to sugar they come under attack, even if it is a small amount. Other ways you may help prevent dental caries through diet include:

- Rinsing your mouth with water after consuming sugary food or drink, or having a small amount of cheese or milk. This will help to neutralize the acid produced by oral bacteria.
- Using sugar free chewing gum may help protect your teeth by stimulating extra saliva. Saliva is very important in protecting your teeth from decay.
- Drinking tea in between meals helps protect teeth from decay.

“ Notably, how frequently you consume sugary food and drinks is more important than the total amount of sugar you consume. ”

What is gum disease?

Gum disease describes a range of conditions that affect the supporting tissues of the teeth. These tissues comprise both the surface tissues that can be seen in the mouth and also the deeper tissues of the bone, root surface and the ligament that connects the teeth to the bone.

What do bleeding gums indicate?

Bleeding gums are a sign of poor oral health. Bleeding is often an indication that the gums are inflamed. The inflammation is generally a response to the bacteria on the surface of the teeth. Bleeding gums are sometimes associated with serious medical conditions. A dental practitioner should check bleeding gums immediately.

Do we really have to go to the dentist every six months? And do we need x-rays at each visit?

How often you go for dental exams depends on your oral health needs. The goal is to catch small problems early. For many people, this means a dental exam every six months. Your dentist may suggest that you visit more or less often depending on how well you care for your teeth and gums, any issues you have, how fast tartar builds up on your teeth, and other factors.

Ask yourself the following questions: Do I floss every day? Do I brush twice a day with a fluoride toothpaste and follow my dentist's instructions on how to brush properly? Do I eat a well-balanced diet, including food from all food groups, and limit sweets and sticky foods? Do I smoke? Do I have a history of cavities or gum disease? Is my overall health good? The answers to these questions are all factors that affect your oral health. They will help you and your dentist decide how often you need to visit for check ups.

How does smoking affect oral health?

Tobacco smoking, in all forms, can be very harmful to your teeth, gums and throat. In addition to causing discoloring, smoking contributes to gum disease, tooth loss and even cancer of the mouth and throat.

When should we take our children to the dentist for the first time?

It's important to get an early start on dental care, so that your child learns that visiting the dentist is a regular part of caring for their health. The first step is to choose a dentist for your child. It is better that you select one who specializes in treating children (a pediatric dentist). Most Dental Associations encourage the assessment of infants, by a dentist, within six months of the first tooth, or at around one year of age. It's important to make the first visit a positive experience for your child – one reason why it's best to visit before a problem develops. The first visit may often involve your child simply sitting in the chair and getting the opportunity to see and touch the equipment.

Get to know your teeth

Early development

Babies' teeth start to grow even before they are born. However, it is not normally until at least six months old when the teeth become visible through the gums. Most children will have developed all 20 of their milk teeth by three years of age and a couple of years later, at five or six, these baby teeth will gradually start to fall out in order to make way for the adult teeth coming through.

Adult teeth

By the start of their teenage years children will usually have developed most their adult teeth. The last of these 32 teeth to come through, the wisdom teeth, generally develop between the ages of 17 and 21.

What are teeth made of?

Teeth consist of four main parts, each with its own layer:

1. On the outside of each tooth, above the gums, is a protective layer of enamel. This is the hardest substance in the teeth and protects the softer inner parts
2. The layer below the enamel is made of dentine. This sensitive substance supports the enamel layer and protects the layers below

3. The third layer is called the pulp. This soft section contains all the tooth's blood vessels and nerve endings
4. Lastly, at the base of the tooth, is cementum, which coats the roots

Facts about teeth

- People have different types of teeth:
 - Incisors at the front of the mouth are used for chopping and cutting
 - Canines are sharp, pointy teeth used to tear food apart
 - Premolars and molars are the largest and widest teeth and are used for crushing and grinding food
- People will only grow two sets of teeth during their lifetime (baby and adult teeth). If the adult teeth are damaged or removed, no new teeth will be grown
- Everyone has a unique set of teeth. No two people have exactly the same set of teeth
- 30 percent of each tooth is hidden underneath your gums

Children's diabetes

Symptoms, diagnosis and management

The increasing rates of diabetes in recent decades have led to many health professionals regarding the disease as one of the most pressing health conditions of the 21st Century.

The World Health Organization predicts that deaths due to diabetes will increase by more than 60 percent between 2008 and 2030. The Gulf region has some of the highest rates of diabetes in the world and, according to the International Diabetes Federation (IDF), the percentage of adults in Qatar with diabetes has increased from 16.7 percent in 2008 to around 20 percent at present.

One trend of great concern is the continuing increase in diabetes among children, particularly due to type 2 diabetes. Before looking at the reasons for this rise, it is important to understand the differences between the two main types of diabetes.

Type 1 diabetes

Also known as insulin dependent diabetes, type 1 diabetes develops when the insulin producing cells in the pancreas are destroyed, usually as a result of an autoimmune process. "Exactly what triggers this process is not clear and there is nothing that you can do to prevent type 1 diabetes. This type of diabetes usually occurs before 40 years of age. It is the least common of the two forms of diabetes and accounts for between five and 15 percent of all cases," explains Dr. Fawziya Al-Khalaf, senior consultant and head of Pediatric Endocrinology. Type 1 diabetes is treated by daily insulin injections, regular exercise and healthy eating. The aim is to minimize short term fluctuations in blood sugar levels and reduce the risk of hypoglycemia (low blood sugar levels).

Type 2 diabetes

This form of diabetes occurs when the body cannot produce enough insulin, or there is a resistance to insulin in the body. Also known as non-insulin-dependent diabetes, it is linked with excess body fat and usually develops in people over 40 years of age. However, increasing numbers of young people are being diagnosed with this form of diabetes due to the rise of children's obesity. There is a clear association between type 2 diabetes and obesity, particularly when the majority of excess body fat is around the waist. Additionally, there is an increased risk when one or two family members have the condition. Diet plays an important

role in helping control blood glucose levels, however it does not appear to be directly involved in the cause (apart from contributing to obesity). Lifestyle changes – including healthy eating, regular exercise and weight loss – are required to treat type 2 diabetes, but if these fail to work, medication may be prescribed. The medication increases the amount of insulin produced by the pancreas, helping to achieve normal blood sugar levels.

Health complications associated with diabetes

- An increased risk of heart disease and stroke. 50 percent of diabetics die from cardiovascular disease
- An increased risk of developing foot ulcers, potentially leading to limb amputation
- Long-term damage to blood vessels in the eye may cause blindness or impaired vision
- Diabetes increases demand on the kidneys. Between 10 and 20 percent of diabetics die from kidney failure.



Diagnosis and symptoms

Early diagnosis of diabetes in children is essential in order to manage the symptoms and reduce the risk of developing complications. Due to a lack of symptoms (or mild symptoms) in the early stages, many people are unaware that they have diabetes.

Symptoms of type 1 diabetes include frequent urination, excessive thirst, extreme hunger, fatigue and irritability. Type 2 diabetics may experience any of these type 1 symptoms plus frequent infections, impaired or blurred vision, slow healing of cuts and bruises, and numbness or tingling sensations in the hands and feet.

Children and diabetes

It is not possible to prevent or cure type 1 diabetes, so it can be very overwhelming for children and their families to receive a diagnosis of this form of diabetes. The child must learn to manage their condition by monitoring their blood sugar levels and injecting insulin appropriately. Although type 1 diabetes requires daily management, advances in blood sugar monitoring and insulin delivery mean children can lead normal lives.

"Type 2 diabetes was once considered an illness affecting only older adults. Yet there has been a dramatic increase in the incidence of type 2 diabetes in children and adolescents during the past decade. The increasing rate of obesity is the biggest factor in the rise of type 2 diabetes among children," notes Dr. Fawziya.

Inactivity and obesity among children, and their related conditions including diabetes, heart disease and certain types of cancer, are all major reasons why some health experts are predicting that today's generation of children could be the first to die at a younger age than their parents (New England Journal of Medicine, A Potential Decline in Life Expectancy in the United States in the 21st Century).

There are several factors that can greatly reduce the chances of your child developing type 2 diabetes: taking regular exercise, maintaining a healthy weight, eating a healthy, balanced diet that is high in fruit and vegetables and not smoking, or being around other smokers.

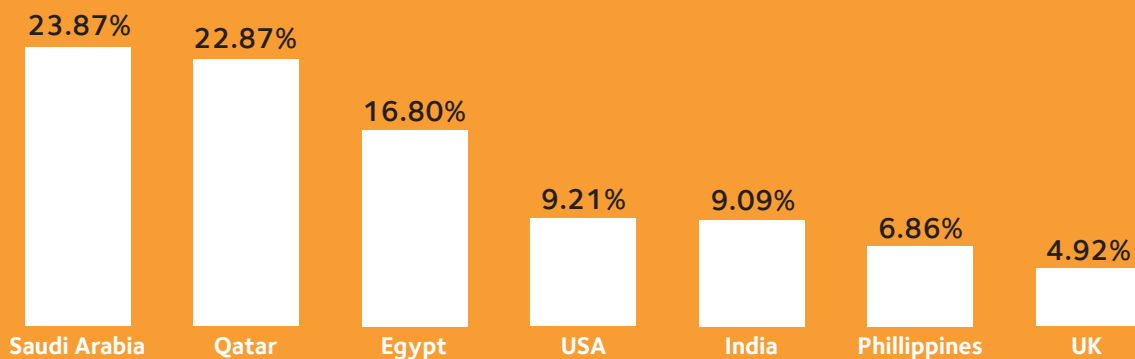
Facts about diabetes

Type 1 diabetes

- Type 1 diabetes is the dominant form of diabetes in children in Qatar.
- Children who have a family history of diabetes are at a higher risk of developing type 1 diabetes.
- Having type 1 diabetes means a child is insulin dependent; the body is not producing a component which is vital and instead relies on an external source, such as an insulin injection.
- Type 1 diabetes cannot be cured.
- Insulin treatment, exercise, healthy eating and education about the disease are the main components of treatment.
- If insulin levels are too high or too low, it can lead to severe health conditions.

“Type 2 diabetes was once considered an illness affecting only older adults. Yet there has been a dramatic increase in the incidence of type 2 diabetes in children and adolescents during the past decade.”

Prevalence of diabetes in the adult population 2013





Type 2 diabetes

- Type 2 diabetes is less common in children but cases are rising because of changes in lifestyle; unhealthy lifestyle choices such as a poor diet and low physical activity can greatly increase the risk of type 2 diabetes in children.
- A child is at a higher risk of being affected by type 2 diabetes if they have a family history of the disease or if their mother presented with gestational diabetes when pregnant.
- The primary focus for treatment in type 2 diabetes is to educate patients and their families on a healthy way of living in order to control their diabetes. Insulin is used to manage some cases.
- Type 2 diabetes is a progressive illness; meaning that it can develop into other illnesses and complications if not treated effectively.

- It is possible to have type 2 diabetes without any symptoms, which is why it is important to understand risk factors and to get your child tested if his/her risk factors are high. Not treating diabetes early can result in irreversible

complications. Risk factors include:

- A family history of diabetes
- Low activity
- A poor diet
- Being overweight
- A diagnosis of prediabetes

Did you know?

- Worldwide, about 350 million people have diabetes
- Type 2 diabetes is the most common form, accounting for around 90 percent of cases
- Increasing numbers of children are developing type 2 diabetes due to rising obesity rates
- By 2030 it is predicted that diabetes will become the seventh leading cause of death in the world
- In the next ten years total deaths from diabetes are expected to increase by more than 50 percent
- Diabetes is a leading cause of blindness, amputation and kidney failure



مؤسسة حمد الطبية
Hamad Medical Corporation

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“When my organ donor passed away,
he saved my life.

I wish I could thank him.”

Abdullah thought he was running out of time and options when he was on the waiting list for an organ donation. He survived when he received the organ he needed from a man who had wished to donate his organs at the end of his life.

By registering as an organ donor while he was alive, not only did he save Abdullah's life, but also brought tremendous happiness and joy to his family.

To give the gift of life, register as an organ donor at Qatar Organ Donation Center (Hiba) at Hamad Medical Corporation.

The gift that lasts a lifetime.



organdonation.hamad.qa

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My snoring has been affecting my sleep for several years now. What causes snoring and what can I do to resolve it?



Most people snore occasionally during their sleep, but when snoring occurs frequently, and for prolonged periods, it can negatively affect the quality and quantity of sleep. Poor sleep not

only leads to daytime fatigue and irritability, sleep deprivation is also associated with a number of more serious health conditions. Studies have shown that for women, snoring is an independent risk factor for coronary heart disease. Severe snoring is also related to sleep apnea, a condition in which breathing repeatedly stops and starts. Medical attention should immediately be sought for chronic snoring issues.

Snoring occurs when the air that is breathed in cannot travel freely through the passageways, due to narrowing. Identifying and resolving the causes is the key to successfully treating most cases of snoring.

There are a number of factors that can lead to snoring: sagging of the palate or a nasal blockage both restrict the space through which air is breathed, while being overweight or obese leads to a build up of fat in the upper part of the throat that causes narrowing of the nasal tract. Sleeping on your back will also contribute to snoring as this causes parts of the throat to relax and block the airway.

Surgical procedures can be used to stop snoring, but these are always a last resort. If the person is overweight then the first step is to try to reduce excess body fat. Neck size has a direct correlation to snoring, with excess weight around the neck increasing the chances of snoring occurring due to pressure on

the airways. There are also various tools and devices available to help clear the flow of air, or prevent you sleeping on your back. Surgery can be used to treat permanent blockages or remove excess tissue to enlarge the pathways.



Dr. Mohamad Khatib, MD, FCCP
Pulmonary, Sleep and Critical Care, HMC

My mother has severe osteoporosis and I'm worried that I may also develop it. Could exercise reduce my chances of osteoporosis?



Osteoporosis is a condition characterized by a decrease of bone density resulting in a loss of bone strength. In its severest form, the bones of osteoporosis sufferers may become so fragile that even the slightest knock or fall can result in a fracture. Although commonly associated with post-menopausal women, osteoporosis can also affect men, younger age groups and children.

Exercise also has a positive effect on bone mineral density and bone strength. Exercise increases the body's ability to combat the natural loss of bone density, reducing the speed at which bone density decreases. People suffering from osteoporosis are advised to avoid high-impact exercises such as running, as these may increase the risk of fractures. However, moderate intensity, low-impact exercises are recommended, as they can offer a number of benefits including increased muscle strength, balance and coordination.

Resistance and strength training have been shown to stimulate bone formation, increase the retention of calcium and prevent

osteoporosis. These weight bearing activities are the most effective forms of exercise at strengthening bones. In addition to preventing bone density loss, exercise helps to strengthen muscles and improve coordination, both important factors in reducing the risk of falls.

To prevent the onset of osteoporosis it is very important to be aware of all the risk factors. Certain risk factors cannot be altered – such as gender and age – yet people should still be aware of these in order to fully understand the risks. However, it is possible to avoid many of the risk factors including smoking, high alcohol consumption and poor diet. Living a lifestyle that follows healthy guidelines will go a long way towards protecting your bones from the harmful effects of osteoporosis.



Before starting an exercise program you should consult with a qualified physiotherapist who can assess your musculoskeletal characteristics and teach you the correct techniques for the program.

Mohamed Aleef, Physiotherapy Specialist at HMC

How much water should I consume each day, and do tea and coffee count towards this?



Water is your body's principal chemical component and makes up about 60 percent of your body weight. Every system in your body depends on water. Lack of water can lead to dehydration, a condition that occurs when you don't have enough water in your body to carry out normal functions. Even mild dehydration can drain your energy and make you tired. The Institute of Medicine determined that an adequate intake (AI) for men is roughly 3 liters (about 13 cups) of total beverages a day. The AI for women is 2.2 liters (about 9 cups) of total beverages a day. You may

need to modify your total fluid intake depending on how active you are, the climate you live in, your health status, and if you're pregnant or breast-feeding. Beverages such as milk and juice are composed mostly of water, as are caffeinated beverages including tea and coffee, and can therefore count towards your fluid intake. However, these should not be a major portion of your daily total fluid intake. Water is still your best option because it's calorie-free, inexpensive and readily available.

Plain water is not the only thing that contributes to fluid balance, other drinks and foods can also have a significant effect. One myth is that caffeinated drinks (like coffee or tea) don't count because caffeine is a diuretic. However, the studies show that this isn't true, because the diuretic effect of these beverages is very weak, and does not negate the water content in these drinks. Eating the right foods can provide about 20 percent of your total water intake. For example, many fruits and vegetables, such as watermelon and tomatoes, are 90 percent or more water by weight.



Muhannad Al Laham,
Dietitian at HMC

How do I know which medications are safe to take while breastfeeding my baby?



Mothers are frequently concerned about exactly what medication they can safely take while breastfeeding. They may have been told that they must stop breastfeeding while taking medication or that all medication is harmful to their baby. But the good news is that most medication is perfectly safe, and for the few medications that are not advised there is normally an alternative option. The medication

that a mother takes does transfer into the breast milk to some degree, but rarely is this in any significant amount, so only occasionally will the mother have to stop breastfeeding while she takes a course of medication.

Common medications that are safe to take while breastfeeding include: most antibiotics, common painkillers, such as paracetamol and ibuprofen (but not aspirin), hay fever medicines, such as Claritin and Zirtek, most cough medicines, asthma inhalers and standard doses of vitamins. However, there are certain medications which should not be taken: aspirin (because of an increased risk of Reye's syndrome), codeine (as it can cause sedation), phenylephrine, phenylpropanolamine and guaifenesin which can all be found in some cough and cold medicines, as well as any medication which leads to drowsiness.

If you are still uncertain, and need some clarification on exactly which medications are safe to take, you can contact the Breastfeeding Center at Al Khor Hospital for specialist advice on 4474 5695.



Dr. Mohammed Ilyas Khan,
HMC Breastfeeding Specialist and Lactation Consultant

Everything you ever wanted to know about garlic



- History shows that garlic dates back 6,000 years and is native to Central Asia
- There are around 300 different varieties of garlic
- China produces 66 percent of the world's garlic
- Garlic is a rich source of vitamin C
- Garlic is also referred to as the stinking rose
- Garlic cloves themselves have a neutral smell, but when the cells are ruptured by chopping or crushing, they release an enzyme called allinase, chemically changing the inherent alliin into allicin, a sulfur-containing molecule. These

sulphur molecules are absorbed into the bloodstream and lungs, escaping through exhaled air and perspiration

- Garlic has long been considered a herbal wonder drug and historically was used to protect against disease
- Garlic was used as an antiseptic against gangrene in the First World War

Hear what our expert has to say

Garlic is one of the best nutritional spices in the world and is unique due to its high sulfur content. Garlic also contains arginine, oligosaccharides, flavonoids and selenium, all of which may offer health benefits.

The World Health Organization's (WHO) recommends adults consume a daily dose of 2 to 5 grams of fresh garlic (about one clove), 0.4 to 1.2 g of dried garlic powder, 2 to 5 mg of garlic oil, 300 to 1,000 mg of garlic extract, or other formulations that are equal to 2 to 5 mg of allicin.

Garlic contains useful minerals such as phosphorous, calcium and iron, as well as trace minerals like iodine, sulfur and chlorine. Garlic also contains high levels of vitamin C, vitamin B6 and manganese. Garlic helps to reduce the risk of heart disease and lowers blood pressure as the allicin relaxes the blood vessels. Garlic has been shown to reduce harmful cholesterol in the blood by increasing circulation and preventing hardening of the arteries.

The immune system can also be boosted by regular intake of garlic, which has a powerful antioxidant effect protecting against free radicals.

Dana Al-Dawoud
HMC Dietitian





How big are your chances of becoming diabetic?

Obesity is a leading risk factor of diabetes.

Being overweight or obese can make you insulin resistant, putting you at high risk of type 2 diabetes. By simply maintaining a healthy body weight, through diet and exercise, you can help keep diabetes away. As Qatar's most specialized diabetes care providers, we take diabetes prevention as seriously as its treatment. Get your blood sugar checked. It's a simple step towards a diabetes-free life.

A healthy approach to diabetes.
A healthy approach to life.

11... the percentage of the world's population aged over 60 in 2000

22... the predicted percentage of the world's population aged over 60 in 2050

www.who.int

9... the number of calories in 1 gram of fat

4... the number of calories in 1 gram of carbohydrate

4... the number of calories in 1 gram of protein

www.betterhealth.vic.gov.au

3,500... the number of calories you need to burn to lose 0.45 kilograms of fat

www.mayoclinic.org

300... the number of bones a baby is born with

206... the number of bones an adult has (due to some bones fusing after birth)

www.kidshealth.org

4,000... the number of chemicals found in cigarette smoke, including more than 50 known carcinogens (cancer causing substances)

www.cancerresearchuk.org

96,500... the length, in kilometers, of blood vessels that transport the blood around the body

www.biologyreference.com

100,000... the number of times the average human heart beats per day

35 million... the number of times the average human heart beats per year

2.5 billion... the number of times the average human heart beats in a lifetime

www.bostonscientific.com