

Second Pillar – Exercise

- 1. Exercise: nectar of diabetes control**
- 2. How much can we speed up the heart?**
- 3. Distribute exercise in three parts**
- 4. Exercise with awareness**
- 5. Advantages of exercise with awareness**
- 6. Let the child be the child**

1) Exercise: nectar of diabetes control

In diabetes control, the most beneficial and the most straight forward aspect is exercise. Exercise does help in blood sugar control but it also has other advantages. These other advantages are very useful for a healthy lifestyle. These advantages are:

1. Muscles are strengthened;
2. Slow down of heart beat. Exercise does hastens heart beat in the beginning but if continued regularly it slows down heart beat.
3. Slowing down of breath:- Again it acts similarly like heart beat hastening in the beginning and slowing down if continued regularly as time progresses.
4. Strengthening of the bones:- Some people have misplaced belief that if calcium is consumed in good quantities bones become strong. Consumption of calcium will go in blood alright when consumed, but it will enter the bones only when you exercise.
5. Exercise is indeed a wonderful thing. If your blood pressure is high it will come down and if low it will rise.
6. There are two types of fat in the body: good fat which is called 'high density lipoprotein' and bad fat called 'low density lipoprotein'. Exercise does increase good fat and reduces bad fat. According to Feneth Footer, the best way to increase good fat (hdl cholesterol) is through exercise.
7. Body is like a motor car. A Maruti Car uses less petrol than an Ambassador car. This is because there is difference in the engines of these cars. Similarly engines of our body work differently. When basic ('bejal') metabolic rate is high it uses more energy and vice versa. This metabolic rate remains high during and up to one hour after exercise.
8. Exercise introduces substances called 'endorphin' in the head which reduce pain and make the person feel good.
9. During exercise blood circulation also speeds up and if any of limbs are not getting proper blood supply, start getting blood through newly formed veins called 'collateral veins';

10. Exercise enhances constructive energy. In a study conducted on students, they were divided into two groups. One group was made to exercise regularly and the other did not. When psychological tests were performed after a certain span of time those that were exercising were found to be more constructive than those who did not.

11. Ageing is differed by exercise. Exercise induces a substance called 'D.H.E.A.' which helps in prolonging youth.

12. Exercise reduces blood clotting by reducing its solidity. Blood becomes more fluid thereby increasing its ability to carry more oxygen.

13. Exercise enables lesser solidification of the platelets (important aspect of blood).

14. A study conducted in Fiji has shown that village folks who eat more than city folks still manage to remain slim. Because they have to physically exert more than the city dwellers. Therefore exercise, together with control on diet, should also be a part of the routine to reduce obesity. However if you walk a lot during the day and perform the other exercises, you will still be less obese even if you might be eating heartily.

The American Heart Association has opined that a healthy person should walk 8 km daily. For diabetics this could be misnomer, because when after reading this some diabetics started 8 km walk from day one, their blood sugar increased instead of decreasing. Actually exercise should be increased slowly in a staggered manner. On the first day walk slowly for only one km, and then increase it by half a km every week. As the distance is increased briskness should also be increased suitably. Because when breathing speeds up and if the briskness remains for 20 minutes only then the exercise becomes beneficial. Exercise increases blood circulation while at the same time reducing weight. You can take food of the same amount of calories or you can change it suitably, which is called 'food exchange'. However, exercise should not be changed likewise but should only be increased slowly. It is best to keep performing the same exercises which you have found beneficial every day. Change in exercises does not help in maintaining good health, specially in diabetes. Regular exercises do not induce tiredness but becomes more energetic. Exercise is that magic wand which can prove all its promises right.

You look better if you exercise because the body weight decreases and 'endocrine' spreads in the head making you feel good. While exercising sugar remains in control and keeps on the good work for hours thereafter.

Who should not perform fast exercises?

- 1. Those whose retina has started deteriorating.*
- 2. Those whose blood circulation in the feet has slowed down.*
- 3. Those whose metabolic system has been disturbed resulting in difficulty in control of blood pressure.*
- 4. Those with heart disease who should not perform exercises involving weight lifting.*

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2) What should be the speed of heart beat?

1. Count heart beat for one full minute when in fully relaxed state. Example 70 (diastolic)
2. For knowing the maximum heart beat subtract your age from 220. Eg. If age is 40, then $220-40=180$ should be the maximum (systolic) heart beat.
3. This may be increased by 60 – 70% i.e. up to 110 – 120.

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3) Distribute exercise in three parts

1. To keep the body warm: slow walk or some straight exercises increase blood circulation as also keeps the body warm. Give 5 to 7 minutes for this.
2. Brisk exercise: Brisk walk or some difficult exercise. Give at least 20 minutes for this.

Remember.....

Walking is the most cost effective, least complicated and the best exercise. Maximum use of calories among animals takes place while walking.

3. Let the body cool down: At the end slow down the speed of exercise for 4 to 5 minutes and then stop. Drink a little water before starting exercises and some more water a little while after the exercises.

While exercising do look in to the watch while starting and also after you finish, find out how long you exercised. It also helps if some people are together, as regularity sets in and time also passes quickly as there is chit chatting all along. In some machines there are gadgets to show how many kilometres you have walked, what is your heart beat and blood pressure. If you want to know these things and if it is easy for you then do go in for the machines. Otherwise exercising without the machines also has the same benefits. "It is advisable that the doctor's advice should be taken before starting on an exercise routine.

Before sunrise the quantity of oxygen in the atmosphere is less and excess of a hormone called 'cortisone' in the blood. By exercising after sunrise the tender rays of the sun prepare vitamin D in the skin. For those who exercise after sunset may have difficulty in sleeping. Therefore it is better to exercise after sunrise and/or before sunset. Do not exercise until 3 hours after food. You may have food half an hour after exercise.

For those who have no time, it will be a good advice that they should get up half an hour or 45 minutes before they normally get up. Finish their morning ablutions and any other personal work and then exercise after the sun rises. This will reduce your sleep alright, but the freshness you will enjoy due to the exercise will be more than what make up for the lost sleep.

It is necessary to laugh to be healthy

"My God! Such a big bottle of pills!" the lady who had come to buy medicine to reduce obesity said. "These are not for swallowing" the doctor remarked. "Then, what are they for?" asked the surprised lady. "Well! The entire bottle is to be emptied three times a day in your room. Then you have to put them back into the bottle one by one" the good doctor explained.

For making exercise and bodily alertness should be the concern collectively of everybody. If the teacher, doctor, journalist, actor, national leaders, virtually everybody that is anybody emphasize on this fact there will definitely be a good response from the general public. When the American athletes came to see the then president Mr. Bill Clinton he said, 'I am happy to see you win so many medals. I would be happier if you are able to inspire the common American to take more and more interest in sports and athletics.' We should all do likewise in our respective spheres of activity.

Some young men went to Vinoba Bhave who directed them to work in the garden. They came back after 10 minutes and showing blisters on their hands to Vinoba said that they were tired and hurt. Vinoba told them that the blisters 'are not because you worked for ten minutes but because you do not work every day'.

Many people attending the 'Positive living with diabetes' camp ask whether it is necessary for them to exercise since they do lot of work at home. It is indeed good to do household work but that is not exercise. If you wish to get the advantage of exercise in household work then club three or four jobs together and finish them one after the other taking about 25 minutes for the lot. This could include sweeping, floor mopping, washing clothes etc. If time is to be counted then we have to exercise for one to one and quarter hour every day. This period can be divided in half a morning and 45 minutes in the evening. Exercise should include all the limbs from toes to head. It is advisable to eat a fruit or some snacks before exercising.

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4) Exercise with awareness:-

1. Spread the hands in line with the shoulders and turning the palm skyward slightly folds the fingers. Imagine that the cosmic energy is entering your hands causing vibrations in your hands. (1 minute)
2. Now bring the palms slowly in front facing each other keeping a distance of an inch or so between the two palms. Now imagine that a powerful stream of vibrations is emerging from the palms. (1 minute)
3. Now imagine that these vibrations have formed into a spring like when two magnets are brought in front of each other a magnetic force is formed. In this position slowly move the palms to the level of the shoulders and again slowly bring them in the previous position, imagining that the spring is contracting and expanding. (3 times)
4. Now bringing both the palms in line with shoulders turn them towards the sky. Now slowly bring the palms upwards imagining that the spring is being further expanded and contracted. (3 times)
5. Now bring your palms in front keeping them four inches apart. Fix the gaze in the equidistant in the space between the palms. In the same position slowly move the hands towards the head and then towards the toes. (3 times)
6. In the same position keeping the distance between the palms at about an inch, slowly bend your knees. After sitting move the palms in line with the shoulders and bring them

near again. Keep thinking during this process that the energy spring is expanding and contracting. (3 times)

7. Now keep the palms extended towards the sky thinking that the cosmic energy is accumulating in your palms. Keep thinking likewise while slowly bending the knees. Straighten up slowly thinking that the cosmic energy is spreading in the universe. (3 times)
8. Now keeping the palms facing each other moves slowly from one side to the other as much as is feasible. Keep the gaze on tips of the palms during this exercise. (3 times)
9. Now keeping the palms in front bring the right leg in front. Now putting the entire weight of the body on the right leg raise the foot on the toes. Taking the right leg back repeat the process on the left leg putting the body weight on the left leg etc.. (alternating 3 times)
10. Now stand in relaxed position and wave the hands freely, up and down ensuring that when your right hand is up your left leg goes behind and when left hand goes up your right leg goes behind. During this process it is to be constantly thought that the flow of vibrations is also moving up and down.

Part – 2 (Standing, with hands)

11. Keeping the palms in front facing each other jerk the palms as if some undesirable substance is being thrown out of the palms. While doing this imagining that all black coloured negative vibrations are being ejected and the body is becoming pure. (1 minute)
12. Stretching the hands in front close the palms tightly and move them in clockwise direction first and then in anti clockwise direction. (5 times)
13. Stretching the hands in front pull them back with a jerk even as you inhale. Then throw the hands again in front with a jerk and exhale. (10 times)
14. Keeping the elbow of the right hand on the palm of the left hand move the right hand 5 times in clockwise direction and then 5 times in anticlockwise direction. Repeat the process with left hand elbow on the palm of right hand.
15. Standing near the wall push it with your right palm making the posture as circular as circular as possible. Then repeat the process with the left palm. (5 times)

Part – 3 (Standing, with legs)

16. Stand with legs spread 2 feet apart. Raising the right leg as much as can be easily done, move the foot and toes up/down fashion. Repeat the process with the left leg. (5 times)
17. Now keeping the feet in the same position move them clockwise and anticlockwise direction for each leg. (5 times)
18. Now keeping the leg straight move clockwise such that it is moved as much away from the body and then brought back in the original position. And then repeat the process in anticlockwise direction. Repeat the process with the other leg also. (3 times)
19. Stand erect. Bend both legs in the knees and straighten with a jerk. While bending inhale and while straightening exhale. (5 times)
20. Stand erect. Raise the right leg sideways as much as possible keeping it straight then repeats the process with left leg. (5 times)

21. Join both knees together and move them clockwise first and then anticlockwise. (5 times)

Part – 4 (Exercise for waist)

22. Standing straight place both hands on the waist. Then slowly turn to right without moving the legs to the extent possible then repeat the process to the left. (5 times)

23. Stand in an 'at ease' pose and raise hands straight in line with the shoulders such that you are in 'T' shape and stretch the right hand till it reaches right thigh. Repeat the process for left hand after restoring to the 'T' position. (5 times)

24. Standing straight raise both hands towards the sky. Now slowly start bending towards the toes as much as possible, trying to touch the toes. Again slowly straighten up. (5 times)

25. Now, still in standing position place hands on the waist, move the neck backwards and bend backwards as much as possible. Then slowly bend forward. (5 times)

26. Standing straight exhale through mouth with force drawing the stomach inward. 2/3 seconds after this inhale through the nose. Then repeat the process after half a minute. (5 times)

Part – 5 (Exercise for the neck)

27. Standing straight bend the chin to touch the chest. Then bend it back. Then straighten up. (5 times)

28. Standing straight bend the neck first to the right shoulder then to the left shoulder. (5 times)

29. Now move the neck clockwise then anticlockwise. (5 times)

30. Locking the fingers move the palms behind the head. Then press the head by bringing the forearms towards the face while pushing the head towards the palms at the same time. (5 times)

31. Now press firmly the right palm on the right cheek. Repeat the process for left cheek.

32. Move firmly lower teeth in front of upper teeth with force. (5 times)

33. Now press the teeth firmly against each other & close the eyes firmly before normalising. (5 times)

34. Stretch the eyebrows firmly upwards. (5 times)

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5) Advantages of awareness in exercise:-

- a. Flexibility;
- b. Help in meditation;
- c. Energy in the limbs;
- d. Calmness in the mind;
- e. Feeling of freshness;
- f. Enhanced concentration.

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6) Let the child be the child:-

Once diagnosed for diabetes parents are after the child saying that he should not go to picnic, not to play, not to eat anything, not to do this and that, what not, without their permission. The poor child is put under too many restrictions. This is wrong thinking. If the diabetes is under control and if the child is aware of it he is absolutely normal and can live like any other normal child. If restrictions are imposed they can adversely affect his mental and physical growth. If you love your child remember this heading 'Let the child be the child – even if diagnosed as a diabetic'.

Diabetes is not a contagious disease like TB. There is no possibility of one child catching the disease from the other. The fact is parents are terribly afraid if the child is found to be diabetic and keep on advising him all day long. The child is also affected with their behaviour. Your fear can replicate in the child. Therefore it is the best solution to deal the problem calmly.

When the child starts taking injections himself do not ask repeatedly, 'Does it hurt? Is it difficult?' to convey your sympathy. Just as when cycling or playing if he falls he himself restores himself, he can easily learn to bear the little pinprick of the injection.

Do keep imparting the knowledge about diabetes to the child. Give him the example of Wasim Akram, the Pakistan fast bowler, who suffered from juvenile diabetes from childhood and yet rose to become an all rounder and captain of Pakistan national cricket team. You can inspire the child that, likewise he can also be a great in his own field. If you have diabetes you have to conquer it, not run away from it. You don't have to keep in wraps.

On the day on which the child is going to spend more time in sports give him some extra healthy diet, before he goes to play, instead of reducing the Insulin dose. This will produce additional calories.

If you notice hypoglycaemia (lower blood sugar than is safe) in the child, immediately give him something to eat and also check with the glucometre. This will keep you informed about the blood sugar level and precise symptoms your child experiences when he/she is hypoglycaemic.

Even a child of 5 or 6 years should be shown that he suffers from this ailment, but there is no need to fear. He will also live his life like any normal child.

9 to 12 year old children are able to learn to use Insulin and also the glucometre all by themselves. Some children can take Insulin even at a more tender age than this. 12 year old children can understand the consequences of not taking Insulin and also the symptoms of hypoglycaemia. At this age itself they should be informed about the problems caused by alcohol consumption among diabetics.

If the child suffers from hypoglycaemia, the parents can learn to give the 'Glucagon' injection from the doctor. Children with ages in excess of 12 years should also be fully informed about diet restrictions, so that they can decide for themselves.

If any camps are conducted in your city for type-1 diabetes, do take your child to that camp. This will enable your child to meet others similarly afflicted. He will then be able to accept the ailment in the first place, and also learn from them about their experiences.

There do arise some problems in nurturing a diabetic child but when we accept this as a challenge then we also feel happy. You will also feel proud when your child will learn to live positively with diabetes.

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