

## Lesson 1: Obesity

A new medical report has found out that the number of obese people around the world has increased by 60% over the past 40 years. The report says that about 12% of the world's population suffers from obesity. Within the next decade 20% of the world's population will be overweight.

The report is based on the body mass index (BMI), the relationship between height and weight. A normal, healthy person has a BMI of between 20 and 25. People with a BMI of over 30 are considered to be obese.

It is no surprise that most of the world's obese people live in the wealthy countries of the world. Six countries - the US, Britain, Ireland, Australia, Canada and New Zealand account for a fifth of the world's obese people. China and the United States have the highest number of obese in the world. In contrast, the poorest countries have the lowest number of overweight people. In southern Asia and southeastern Asia, for example, 20% of the population are underweight.

Having too many overweight people puts an enormous financial burden on our health system, through rising costs for medication, doctors and hospitals.

Medical experts point out that obesity cannot be treated with medication and exercise alone. It is also important to change your diet and consume less fatty food and sugary drinks. We also need to eat more fresh fruits and vegetables and reduce the intake of processed food.

### New Words:

Account for: make up

Based on: here: the facts you use for a report

Burden: something difficult you have to deal with

Considered to be: thought to be

Decade: ten years

Enormous: very big

Exercise: physical activity that you do to make your body strong and healthy

Height: how tall you are

In contrast: on the other side

Increase: go up

Intake: what we eat and drink

Medication: medicine

Obese: being too fat so that it is dangerous for your health

Obesity: situation of being obese

Overweight: to be too heavy

Point out: explain

Processed food: food with chemicals in it so that it lasts longer or tastes better

Reduce: lower

Sugary: with a lot of sugar

Treat: to cure a person of a disease

Wealthy: rich

Weight: how heavy you are

## **Lesson ۲: Silent Killer; Sport against High Blood Pressure**

According to the World Health Organization over a billion adults around the world suffer from high blood pressure. It is now taking steps to fight against what is called a silent killer. High blood pressure can lead to strokes and a heart attack.

Almost ۱۰ million people die of these two diseases every year. They are the number one causes of death globally. High blood pressure also leads to kidney failure, blindness and other illnesses. It often goes hand in hand with diabetes and obesity, which increases health risks even further.

As the WHO reports, people in developing countries in Africa suffer more from high blood pressure than people in developed countries. The reason is that health care in the developed world is much better organized and people go to the doctor soon enough.

High blood pressure should never be ignored and always taken seriously. It is a warning sign from your body that something is not OK. Although people may live with high blood pressure for years without even knowing it, it is important to check your blood pressure regularly and take the necessary steps.

The WHO says that you can reduce your blood pressure by changing your living habits. Eating a balanced diet, exercising regularly, avoiding alcohol and nicotine are some things that you can do without consulting a doctor.

### **New Words:**

According to: as reported by

Although: while

Avoid: keep away from

Balanced diet: all kinds of food that your body needs in order to be healthy and grow properly

Billion: a thousand million

Blindness: not being able to see

Blood pressure: the force with which blood flows through your body

Cause: reason

Consult: ask, go to

Developed countries: rich countries

Developing countries: poor countries in Africa, Asia and Latin America

Diabetes: serious disease in which there is too much sugar in your blood

Failure: if something stops working

Globally: around the world

Ignore: pay no attention to

Kidney: one of the two organs in your lower back that separates waste products from your blood and makes urine

Necessary: needed

Obesity: when someone is fat in an unhealthy way

Reduce: lower

Regularly: often

Step: measure, action

Stroke: when a blood vessel suddenly breaks or gets blocked

Suffer: to be ill with

## **Lesson ۳: Fitness Indexes**

The body is an amazing object; the more you ask of it, the more it can do. If you are inactive most of the time, your body will quickly become tired when it should be active. But if you are active many times each day or week, your body will get used to the hard work and it will become easier to do. Children who want to play active games with their friends should exercise regularly so they have the energy to play as long as they want.

Many young people want to be physically active because it helps them look and feel good. Activity burns more calories than just sitting, so it is important for keeping a healthy weight. Exercise also makes your muscles and bones stronger and keeps your body in a good condition.

Physical activity also helps people stay healthy. Exercise strengthens the immune system, and helps the body fight off illness. Daily exercise also helps people sleep better. Active students don't complain about being tired. They have a good night's sleep and have the energy to work hard and have fun every day.

### **Strength**

Strength is the force that muscles use. People used to think only boys could be strong, but that is not true. All people who want to be active and healthy must be strong. Strength training keeps your bones strong. People who are strong can do activities more easily and may learn sport skills more quickly.

Being strong does not always mean that you have big muscles. Muscle size is often determined by your genes-very few people will look like bodybuilders when they get stronger. Age also helps find out muscle size. Children of elementary school age will become stronger by doing exercises, but their muscles probably will not grow much bigger. Boys may get bigger muscles if they do strength training because their hormones may rise. Girls can also become stronger but they won't get bigger muscles because their balance of hormones is different from that of males.

### **Making Muscles Stronger**

To strengthen your muscles, you must make them work harder than usual. Lifting weights in a gym is not the only way to increase strength. You can build strength just by helping to do things at home like lifting or bringing grocery bags from the car to the kitchen.

To increase strength, try moving a heavier object than normal. This could be a heavier weight or a heavier grocery bag. After a while it will be easy to move this heavier object. Anytime an object becomes easy for you to move, you must increase the weight again if

you want to continue to get stronger. Remember, it takes time to become strong. But you should increase weights slowly, otherwise your muscles may get hurt.

Exercises like push-ups and sit-ups will also build strength. When you do these exercises, you move the weight of your own body. Although you cannot increase your own weight, you can continue to build strength by always doing more sit-ups or push-ups

You must also do the right exercises. Lifting weights with your arms will not make your leg muscles stronger. If you want stronger legs, you must do leg exercises. For the best fitness, it is a good idea to work on strengthening all your muscles by doing many different exercises.

### Aerobic Fitness

The lungs bring oxygen to the blood, and the heart pumps the blood through blood vessels to the muscles. Cardiovascular fitness is the body's ability to bring oxygen to the muscles for a longer time. The more oxygen you can bring to your muscles, the longer you will be able to exercise without becoming tired. Cardiovascular fitness is also called aerobic fitness.

Perhaps you have done aerobic activities, such as biking or running, that make you breathe faster and harder. You breathe harder because your body is trying to take more oxygen from the air and bring it to your muscles. The more work you do, the more oxygen you need. Regular physical activity makes the heart, lungs, and muscles become stronger and more efficient.

### Counting Your Pulse

Every time your heart beats, it pushes blood through your blood vessels. You can feel this beating or pulse with your fingertips. The best place to feel your pulse is near your wrist. Place your index and middle fingers at the beginning of your thumb on the inside of your wrist. To find out your heart rate, count your pulse for six seconds and put a zero at the end of the number you counted. For example, if you counted nine pulses (or heartbeats) in six seconds, your heart rate would be 90 beats per minute. Compare your heart rate when you are at rest with your heart rate during or just after aerobic exercise. It should be much faster then.

### Improving Your Aerobic Fitness

To keep healthy, everyone should try to be active for 30 minutes at least five days a week. But if you want to improve your aerobic fitness, you need to exercise hard enough to raise your heart rate into the target heart rate zone on at least three of those days. The target heart rate zone is the level at which the heart and lungs become stronger most quickly. When athletes train to perform better in a race, they try to keep their heart rate in the target heart rate zone for as long as possible.

This zone depends on a lot of things like age, weight and sex. Generally if your pulse is between 120 and 170 beats per minute, your heart rate is in the target heart rate zone. Try to keep your heart rate in that zone for at least 10 minutes. Slowly increase the amount of time you maintain your heart rate in the target heart rate zone until you can do it for 30 minutes each time you exercise.

#### What Type of Activities Are Best for Aerobic Fitness?

Any activity that makes your heart beat faster and that you enjoy is a good type of aerobic exercise. If you like jumping rope or cycling, that is the activity you should do. You don't have to do same thing every day. In fact, two days of basketball, three days of swimming, and two days of bicycling can be more fun than jogging every day.

#### Flexibility

Joints are points in your body that allow you to move. Your body has many joints, including the shoulders, elbows, wrists, hips, knees, and ankles. A joint that is healthy can move in all directions very easily.

Why is this important? Your muscles and ligaments are important for joint health. Stretching activities are important to keep joints healthy. Flexibility slowly decreases when people get older. By doing regular stretching activities, you can help keep the full range of motion at each joint.

If you watch athletes warm up, you will see that they all do stretching activities before competition. Stretching helps athletes avoid injuries because it moves blood to the muscles and prepares them for difficult activities. Stretching after exercise moves blood through the whole body and you don't feel so much pain in your muscles the next day.

Stretching can also help you feel relaxed. If you are tired or worried, try doing flexibility activities and deep breathing together. You may feel better and will keep your joints healthy at the same time.

#### Flexibility Exercises

Flexibility exercises should be done with slow, controlled movements. You should move slowly until the muscle being stretched starts to hurt a little. Hold this position for 10 to 30 seconds and then relax.

#### How to get started

People who have not been very active in the past should begin slowly. Do not try to exercise too much at once. If you are normally active, you may want to try some new exercises.

#### Clothes

The right clothing will make exercise easier and more enjoyable. A good pair of shoes gives support to the feet during exercise. Athletic shoes do not have to be expensive, but they should fit well and be comfortable. Make sure shoes are tightly laced, and wear socks so that you won't get blisters.

You should choose clothing that is suited to the type of activity and the temperature. If you are exercising in warm weather, wear lightweight and light-colored clothing and a cap or hat to shade your head from the sun. If you are active in the cold, try wearing many layers of clothing instead of a heavy coat. This keeps you warmer and lets you move more freely. If it is raining outside or you will be playing in the snow, wear clothing that is water-resistant -once your clothes get wet, it is hard to stay warm.

It is also important to wear things that will protect you. For example, you should always wear a helmet when cycling. Pads, mouth guards, or protective eyewear might be necessary when taking part in other activities.

### Soreness, Aches, and Pain

You may feel muscle soreness for a few days after trying something new. This may mean the activity you did was too strenuous or involved muscles you do not use often. Muscle soreness is normal and will usually go away in a few days. Soreness is different from pain. If you ever feel pain in a muscle or joint, you should tell an adult or go to the doctor.

Sometimes you may develop an ache on the side of your upper stomach during activity. Nobody knows exactly what causes a side ache. Stretching the side that is hurting, taking deep breaths, or putting pressure on the ache with your hand may help. At other times, you might have to rest for a few minutes until the ache goes away.

### Selecting an Activity

There are many factors to look at when selecting a new physical activity. The most important is choosing something you enjoy and will want to do often.

Everyone needs activities that help them keep or improve their strength, aerobic fitness, and flexibility. You may want to select an activity from an area in which you think you need to become better. For example, if you are flexible and able to run long distances but are not very strong, you could choose some activities that increase strength. If you are strong but need more aerobic fitness, try walking, jogging, biking, or dancing.

Different activities need different skills. Your school years are an excellent time to develop athletic skills. Some skills will improve with practice while others may always be difficult for you. Some people are better at certain activities than others, but do not let that put you off. If you enjoy an activity, feel free to do it.

You may need to try several activities before you find the ones that are right for you. For example, you may find you enjoy activities you can do alone, like running or biking. Or you may prefer to participate in team activities. Some people like competition, while others prefer activities in which there are no winners or losers. Whatever activities you choose, becoming physically fit will make you healthier for life.

### **New Words:**

Ability: being able to do something

Activity: something that you do because you enjoy or like it

Aerobic: kind of activity or exercise that uses up oxygen and makes your lungs and heart stronger  
Although: while  
Amazing: surprising  
Amount: how much  
Ankle: the joint between your foot and your leg  
Athletes: people who do sports in a competition  
Avoid: to prevent something from happening  
Balance of hormones: the substances that help your body grow; you should not have too many or too few of these substances  
Beat: hit  
Blister: when your skin starts to swell for example after a burn  
Blood vessel: one of the tubes through which blood flows in your body  
Breathe: to take air into your lungs  
Cap: a flat hat that is curved at one end  
Cardiovascular: everything that deals with the heart and blood system of your body  
Cause: lead to  
Certain: special  
Comfortable: to make you feel good  
Compare: measure, here: to see how high something is  
Competition: an event in which people or teams play against each other  
Complain: to say that you are unhappy about something  
Condition: shape  
Controlled movement: to move in a way that you are in command of what you are doing  
Deep breathing: to take in as much air as you can through your lungs  
Depend on: to be affected by  
Determined: influenced by  
Develop: grow  
Direction: way, course  
Distance: the space between two things  
Efficient: to work well together without wasting energy  
Elementary school: the first few years at school  
Enjoy: like  
Enjoyable: something that you like  
Exercise: to do sports very often so that you stay healthy  
Fingertip: the end of your finger  
Fit: the right size  
Flexibility: when you can bend the parts of your body easily  
Force: power  
Full range: here: in all directions  
Get used to: to do things that no longer seem difficult or strange to you  
Grocery bag: a bag that you put food from a supermarket in  
Gym: a special building or room that has machines to exercise or do sports with  
Heart rate: the number of times your heart beats every minute  
Helmet: a strong hard hat that you wear to protect your head  
Hip: one of the two parts on each side of your body between the top of your leg and your waist  
Illness: disease

Immune system: the system by which your body protects itself against disease  
Improve: to make better  
Inactive: not active  
Increase: to go up or make bigger  
Index finger: the finger next to your thumb  
Injury: to be hurt  
Instead of: in something's place  
Involve: here: use  
Joint: a part of your body that can bend because two bones meet there  
Jumping rope: a long piece of rope that you use to jump over  
Layer: material between two other things  
Ligament: a band of strong material that holds bones together  
Lightweight: not very heavy and easy to wear  
Maintain: keep  
Male: about a man  
Motion: movement  
Mouth guard: an object you put in front of your mouth to protect your teeth  
Muscles: one of the pieces inside your body that you use so that you can move; it also holds your bones together  
Otherwise: or else  
Oxygen: a gas that is in the air and that we need to breathe  
Pad: object that is made of cloth or rubber, used to protect parts of your body  
Pain: the feeling that you have when something hurts  
Participate: take part in  
Physical: everything that is about your body  
Pressure: to put force or weight on something  
Protect: guard, defend  
Protective eyewear: to wear something so that your eyes will not get hurt  
Pulse: the beat that you can feel when your heart pumps blood through your body  
Push-up: an exercise on which you lie with your face on the floor and push your body up with your arms  
Put you off: don't let it stop you  
Race: an event in which people run against each other and see who is fastest  
Raise: to go up  
Regularly: at the same time every day, every week etc..  
Relaxed: to feel calm and not worried  
Rise: go up  
Several: many  
Sex: whether a person is a man or a woman  
Shade: to protect from direct light  
Shoulder: part of your body where your neck is connected to your arm  
Side-ache: a pain on the side of your body  
Sit-up: an exercise to make your stomach muscles stronger; you lie on the floor and try to sit up without moving your legs  
Size: how big something is  
Skill: the ability to do something well, because you have learned it

Soreness: when something causes pain because you have exercised too much

Strength: power, how strong something is

Strength training: exercise that you do to make you stronger

Strengthen: to make stronger

Strenuous: something that makes you very tired

Stretch: to straighten your arms, legs and body after exercise

Suited: the right things to wear

Support: here: something you wear that holds you up

Target heart rate zone: the heart rate at which it is best to exercise - it makes you physically stronger and improves your health; normally it is about 70% - 85% of your maximum heart rate

Tightly laced: to fasten something and keep together by tying it up

Water resistant: it does not allow water to get in

Weight: how heavy you are

Whatever: any, it doesn't matter which

Worried: upset, unhappy about something

Wrist: the part of your body where your hands come together with your arm