

# TRINITY COLLEGE NABBINGO

DEPARTMENT OF PHYSICAL EDUCATION

SENIOR ONE NOTICES

## Exercise, Rest and Hygiene



### Topic summary;

- The meaning of exercise and Rest
- Why exercise and rest are important to Personal wellbeing
- The importance of personal hygiene and cleanliness.
- Guiding questions

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### a) What is Exercise?

What happens inside you when you run, swim, dance, play football, or enjoy some other form of exercise?

As the muscles in your arms, shoulders or legs alternately contract and relax, they use energy. Your heart beats faster, and you breathe more rapidly and deeply. The blood flow increases, body temperature rises, and you begin to sweat.

### b) Understanding exercise

- i) What exercise is? Refer to your books
- ii) Why one sweats during exercises.
- iii) Which activities can one do in order to exercise?

### c) Types of Exercises

Different exercises have different benefits to the body. For this reason, they are categorized according to the physical fitness component they will improve.

**Exercises are classified into two types: aerobic and anaerobic.**

#### I) Aerobic exercises

These are nonstop, repetitive, strenuous physical activities that are performed in the presence of oxygen throughout the exercises. Aerobic exercises usually improve muscular and cardio-respiratory endurance.

#### NOTE:

Respiration, is the process that takes place in living cells which releases energy from food molecules. Glucose from food is used to fuel the exercises and oxygen is required to break down glucose to produce the energy which is used to make our muscles contract which enhances movement in all our physical activities and exercises. Waste products including carbon dioxide are produced as a result of the chemical reactions, these must be removed and excreted in form of sweat (**why one sweats during exercises**).

When you exercise at a steady, comfortable rate the cardiovascular system (heart) IS able to supply the muscles with all the oxygen they need

**Glucose + oxygen --→ energy + CO<sub>2</sub> + water**

Aerobic exercise can be maintained for long period of time without the performer getting breathless or suffering from muscle cramps, moderate activities like walking, jogging, cycling and swimming use aerobic respiration or exercises.

## II) **Anaerobic exercises**

When you exercise at high intensity (speed) the cardiovascular system cannot supply enough oxygen to the muscles under this condition anaerobic respiration or exercise take place ; **Glucose → energy + lactic acid**

With no oxygen available, glucose is burnt to produce energy and lactic acid, lactic acid is a mild poison as it builds up it causes muscle pain and eventually cramps.

Intense activities like, sprinting, weight lifting, jumping, and throwing use anaerobic exercise or respiration.

These are intense physical activities that last only from a few seconds to a few minutes, during which muscles use up more oxygen than the blood can supply. Anaerobic exercises usually improve the flexibility, strength and sometimes speed at which the muscles work

### **OXYGEN DEBT**

After anaerobic activity oxygen is needed to neutralize the lactic acid. This is called an oxygen debt, it is repaid after exercise .the oxygen reacts with lactic acid to form carbon dioxide and water. Rapid and deep breathing is needed for a short period after intense exercise in order to repay the oxygen debt this helps to remove the CO<sub>2</sub> which accumulates in the blood during anaerobic exercise

## Myths and Facts about Exercise

No.	Myths	Facts
1	No pain, no gain: exercise to the point of feeling pain is the	Pain is a danger signal—a signal that you are causing Harm. Sharp or sudden pain should be a
2	Sit-ups and other abdominal exercises will decrease fat in the	You cannot spot reduce or lose fat just in one area.
3	Drinking fluids before exercising Can cause stomach cramps.	Plain water will not cause cramps. Without adequate water, you can become dehydrated, which can
4	Being thin is a sign of fitness.	Thin people who do not exercise are likely to have
5	If women lift weights, they will develop large muscles.	Women actually have less muscle tissue and more fat tissue than men. They have a balance of hormones that prevent the development of
6	Exercise is unsafe for older people.	The health of elderly people can benefit greatly from

### d) What is Rest?

Think about the following and write your suggestions in your books:

- What rest is?
- The benefit of having enough rest.
- The different forms of rest.

✓ Draw up an exercise routine for your family for a week, putting into consideration the need for rest. (Read my summary at the end of this topic to guide you on this)

✓ NB: DO IT IN YOUR BOOKS

ICT

Search the Internet for different forms of rest and the benefits of having enough rest.

## What is Sleep?

**Rest** is best achieved when one sleeps. Sleep is the deep relaxation of the body and mind during which the eyes are closed and there is little conscious thought or movement.

As you sleep, your body and brain undergo changes that make up a sleep cycle. The sleep cycle involves light sleep, deep sleep and dreaming. The first stage consists of a gradual period of falling asleep. During stages two and three, your sleep becomes deeper and your muscles more relaxed.

These stages of deep sleep help restore the body and renew its energy.

Note: People who exercise regularly spend more time in 2nd and 3<sup>rd</sup> stage than people who do not exercise.

Benefits of engaging in physical exercises and rest




Fig. 5.1: Examples of exercise

- i) Engage in any form of exercise around your compound or in your sitting room and;
- ii) Write down ideas about your inner feeling after engaging in a physical exercise.
- iii) What would you miss if you don't engage in such active activities
- IV) identify reasons why you would need to rest after that active exercise
- v) Identify forms of rest that you normally undertake.
- vi) Explain what would happen if one worked continuously without rest.

### Read the text.

Rest is the state of putting the body out of regular actions that stress the muscles. There is a body energy reserve that continues to reduce when we are doing work. You therefore need to rest to allow the body to mobilize the energy fuels into the stores to enable you continue with work. There are different forms of rest which include: sitting, lying or sleeping. It is therefore important to have rests between any forms of activity. That is why there are breaks with your study timetable as well as during a sports game such as netball, basketball, football etc. It is also the reason why people go to sleep after a day's set of activities.

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At times, during rest we can engage into some light activities that require less energy such as eating, watching a film, watching other people play.

## **e) Personal Hygiene**

### **i) Understanding our body**

The human body is made up of many parts. Some of the parts remove wastes from the body. It is therefore important to keep them clean. The clothes you wear must also be clean. The care you give to your body and clothing is known as personal hygiene. A person who takes care of himself/herself is always confident, cheerful and active. In order to keep high standards of hygiene, it is good to have a daily and a weekly routine of personal hygiene. Different body parts need different types of care. Each body part should be given the care it requires.

#### **NOTE:**

Maintaining personal hygiene and cleanliness of sports clothing's and body is really important since; it prevents

- a) Discomfort
- b) Embarrassment
- c) Infections
  - Showering and wearing clean clothes after exercising can prevent embarrassing body
  - Odour and itchy skin rashes
  - Changing into fresh socks is very important because feet are susceptible to nasty.
  - Infections like athletes foot and verrucae, these are uncomfortable and can affect your health and performance.

### **ii) Caring for the Face**

**Understanding hygiene of the form one student**

**Your mouth and the teeth.** The teeth are used for grinding and breaking food into small particles for easy swallowing. Food left on the surface and in-between the teeth leads to problems. If it is not removed, it can lead to tooth decay. It is good to brush the teeth every morning and after every meal and before going to bed at night.



Care for the teeth.



**In your books;**

- i) Discuss the reasons why we need to keep the mouth and teeth clean.
- ii) Write down the different materials which are used in Cleaning the your teeth.
- iii) Discuss the different ways of brushing teeth.
- iv) Now go and brush your teeth using the materials provided.

**NOTE:**

The cleaning of the teeth includes:

- i) Using a toothbrush, tongue crapper or tooth stick to remove all the dirt from the tongue.
- ii) Using toothpaste.
- iii) Using local materials such as charcoal and salt.
- iv) Rinsing the mouth thoroughly with clean water.

**Note:** Never use sharp or dirty objects to remove food between the teeth because they can damage the gum.

### iii) Caring for Hair

Hair appears beautiful when kept clean and healthy.



Fig. 3. 4: Combing the hair

#### How to care for the hair

- i) *How do you take care of your hair and which materials do you use*
- ii) *Which local materials can you use to clean your hair?*



Fig. 3.5: Manufactured hair care products

You can keep your hair clean and neat at all times by washing, drying, oiling and combing. This keeps away dandruff and lice.

It is dangerous to share combs, brushes and towels. Sharing these items may lead to the spread of diseases like ringworm and parasites like head lice.



It is important to trim hair in order to remove dead ends, keep it in shape and manageable. It is not advisable to shave off the hair completely. This exposes the scalp to direct sun rays.

Regardless of the hairstyle, hair must always be neatly kept.



*Fig. Hairstyles*

#### iv) **Caring for the Hands and Nails**

Hands are essential parts of the body. They too must be kept clean. Hands are often in contact with food and dirt. Long fingernails hide dirt and germs and need to be properly washed. Washing hands is a good practice as it protects us from germs.

#### **Checking personal hygiene**

**: Do you wash your hands after . . .**

- i) Using the toilet?
- ii) Blowing your nose?
- iii) Cleaning animal waste or garbage?
- iv) Touching a sick person?
- v) Cleaning a baby?
- vi) Change nappies?

**Do you wash your hands before and after**

- i) Eating?
- ii) Preparing food?
- iii) Treating wounds or cuts?
- iv) Touching a sick or injured person?
- v) Carrying a baby?

**Remember to practice this with your family members. You will only need water and soap. Hand's touch so many things both clean and dirty. Wash them using soap and water to keep them clean. Do not forget to wash the inner parts if you have long nails.**

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The 7 steps of washing hands as shown in Fig. 3.7 include:

**NOTE; WASH YOUR HANDS WELL AND PLEASE WEAR YOUR MASK COVID IS THERE**

How to wash hands correctly and reduce infection

1. Rub palm to palm



2. Rub the back of both palms

3. Rub palms again with fingers interlaced



4. Rub backs of interlaced fingers



5. Remember to wash back thumbs



6. Rub both palms with fingertips

7. Wash hands under running water using soap, rinse and dry thoroughly

Fig. 3.7: How to wash hands

Hand washing:

- is highly effective in reducing the spread of germs and COVID 19
- must be done regularly and correctly.

Note: Nail biting is bad. It causes disease. You should avoid it.

#### v)Caring for the feet

The feet, just like the other body parts, need good care especially during hot weather. The feet must be kept clean and dry. Dirty and damp feet encourage the growth of fungus called foot rot between the toes. These lead to unpleasant smell and pain. Proper care of your feet will improve your general appearance

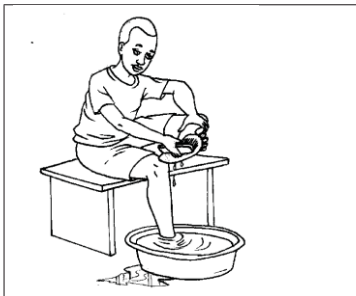
**Study the picture below and respond to the tasks below.**

- i) What is wrong with the picture shown?
- ii) Write down the possible causes of the situation.
- iii) What can be done to help people facing such a situation?



#### **NOTE:**

- i) Wash the feet especially between the toes.
- ii) Dry the feet properly.
- iii) Trim toe nails.



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- Air the feet frequently.
- Put on open shoes in the hot season.
- Avoid damp stockings.  
Wear comfortable shoes.
- Avoid tight and high heeled shoes.



Fig. 3.12: An example of clean and nest shoes

#### vi) Caring for the Body

Think about the following and give your suggestions :( **in your books**)

- What advice would you give to a friend who does not bath on a daily basis?
- Compose a poem about the importance of bathing

	<b>Activity of Integration: Promoting health living.</b>
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Health professional recommend that for full body wellness, one needs to do exercises, have enough rest and keep high level of hygiene. However, it is observed that many people especially the youths are visibly below the healthy threshold since they hardly get enough time to exercise, rest and take care of their personal hygiene. This puts them at risk of diseases that could have been avoided.

**DO THIS ACTIVITY IN YOUR BOOK**

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- a. Using your experiences acquired through studying this topic, write a newspaper article to promote healthy living through exercise, rest and proper hygiene.
- b. Showcase practically the correct ways of exercising and keeping proper hygiene to help young people stay healthy.

## SUMMARY OF THIS TOPIC

### IMPORTANCE OF REST AND RECOVERY AFTER Exercise

#### a) WHAT IS REST?

#### b) What is exercise?

Most athletes know that getting enough rest after exercise is essential to high-level performance, but many still over train and feel guilt when they take a day off. The body repairs and strengthens itself in the time between workouts and continuous training can actually weaken the strongest athletes.

Rest days are important to sports performance for a variety of reasons. Some are physiological and some are psychological. Rest is physically necessary so that the muscles can repair, rebuild and strengthen. For recreational athletes, building in rest days can help maintain a better balance between home, work and fitness goods.

In worst-case scenarios too few rests and recovery days can lead to overtraining syndrome a difficult condition to recover from

The specific effects of rest depend on the length of the rest period and the type of event within which rest is provided when the event is a practice or exercise session or competition, rest periods are usually taken or provided within the event and last for seconds or minutes. These periods have three functions/importance ;(**IMPORTANCES OF REST**)

-First, they reduce physical fatigue induced the activity

-Physical systems engaged during activity consume energy and produce waste products.

-Rest affords energy replacement and removal of waste products from the body

-Despite common beliefs that physical fatigue negatively affects psychological functioning (e.g. decision making (DM), there is little evidence of this currently.

-Secondly, Rest periods within an event reduce stress fatigue

-Rest during practice sessions specifically can enhance the learning of movement skills, the provision of rest within a practice session is termed (Recovery Period)

### **What happens during Recovery OR rest?**

Building recovery time into any training program is important because this is the time that the body adapts to the stress of exercises and the real training effect takes place.

Recovery also allows the body to repolished energy stores and repair damaged tissues.

-Exercise or any other physical work causes change in the body such as muscle tissue breakdown and the depletion of energy stores (muscle glycoceal as well as fluid loss)

-Recovery time allows these stores to be repolished and allows tissue repair to occur without sufficient time to repair and replenish the body will continue to breakdown from intensive exercise.

Symptom of overtraining often occur from a lack of recovery time, signs of overtraining include a feeling of general malaise, staleness, depression, decreased sports performance and increased risk of injury among others.

### **PLEASE ANSWER THESE QUESTIONS (in your books)**

(QN 1) In the fight against COVID 19, the ministry of health as advised the public to do more exercises as one of the measures to fight the pandemic

- a) Task, draw up an exercise routine for your family for a week putting into consideration the need for rest

### **NOTE THE FOLLOWING**

Before you draw up any personal exercise program (PEP), the first thing you need to identify is

- a) What is the goal of your PEP, this might be for a particular competition, improvement of certain skills or for health benefit like in our case?
- b) You need to get specific, identify the fitness components that need improvements

**All exercise programs should be designed to improve a specific individual's health, fitness and performance. In order to draw up an exercise program you need to understand the following;**

- a) The abilities and the needs of individual e.g. age, current level of health and the level of fitness of your family members
- b) What your PEP is trying to achieve(what is your goal)

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- c) The principle of exercising, which methods are you going to use in order to achieve your goals of exercise with your family (what form of exercise do they enjoy doing, it is best to include activities that family members enjoys or there is a chance that they will stop exercising due to boredom

Commented [LR1]:

The principle of exercising can be memorized by the word **SPORT**

S – Specificity

P--- Progression

O----Overload

R-----Reversibility

T ---- Tedium

- d) How to plan the programme, what is supposed to be done and when  
e) How to assess the set goals of each individual and review the plan

✓ **Now you can go ahead and draw an exercise programme for your family**

**(QN2) Danielle goes for jogging once a week for 45 minutes**

- a) List two differences between the air that Danielle inhales and the air that she exhales while jogging  
b) What two substances are used by Danielle's body to produce energy  
c) Danielle tries to increase her pace; she finds that she is forced to stop running and breathe hard for several minutes. explain why she had to stop  
d) How did breathing hard help her to recover.

**END**

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