CHAPTER – I

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Education can be defined as a change, a modification, or an adjustment on the part of an individual as a result of experience. It is associated with learning and is characteristically followed by some change in behavior. If that change is positive and in the right direction, it seems to help those individuals being educated to adjust more effectively to their constantly changing environment, to understand more readily their experiences in that environment, or adjustment is manifested through growth, development, and achievement^1.

Education is the process by which the individual is shaped to fit into the society and which maintains and advances the social order. It is a systematic process designed to make man more rational, mature and knowledgeable. Education is the modification of behaviour of an individual for his own personal happiness, for his better adjustment in society and for making him a successful citizen, contributing something original to the society.

"Education of a man is an education of a single person, but the education of a woman is an education of a family", said Gandhiji. This

quotation gives us a lot of understanding about the importance of Girls' education.

In this scientific world, it is necessary to educate the girls to prepare them to live with honour. Education enables them to take right decisions in difficult times. An educated man can live well, think well, decide well and do well.

An educated woman may be a good friend, good mother, good sister and a good life partner. Therefore education is necessary to make a confident woman.

In the internal organisation of the family, a man is in the position of the head and the over all supervisor. In fact it is the eldest member of the extended family who occupies the position of the head. A man's major responsibilities lie outside the family. He is to support the family economically and materially, he has to look after the relations of the family with the rest of the society, economy and policy and he has to take care of the demands of internal discipline within the family. A woman's major responsibilities lie within the family. Here too, the eldest woman is regarded as the center of the family organisation but within each circle and fold the woman who constitutes its core enjoys the relative central position. A spectrum of mutual rights and responsibilities has been evolved in such a way that balanced relationships are developed between all.

It has been truly marked by some wise men that if health is lost then every thing are lost. In the modern life, the scientific development,
technological advancement and research findings in every part of life demands fitness to overcome all the difficulties in life. Henceforth it can be uttered man’s existence and effectiveness depends upon his physical fitness. A happy child is a pride of a nation, children are the world greatest resources let us have a great millennium ahead with reference to the investment of child’s developments which would be an investment of a strong and developing nation like our country India.

**Importance of Fitness:**

The rational of a fitness need has been expressed in numerous ways to the public in the past few years, although fitness must be planned longitudinally for optimum benefit. As Dr. Roy Shephard a prominent Canadian researcher in physical activity has stated “Physical activity is a learnt behaviour” and the earlier the habit is acquired the most likely it is to persist into adult life"^{2}.

Underlying the objectives of the fitness initiative is a belief that health is a very personal matter and is ultimately the responsibility of the individual. Each person in accepting or rejecting this responsibility must realize the implications of the choice on the lives of others in our families in our communities and in our society.

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The 1920’s were particularly significant for the field of testing. During this era, however, new statistical techniques became available and more scientifically constructed tests were developed. C.H. McCloy of the University of Iowa, David, did pioneer work in the field of scientific test construction. K. Brace of Texas developed his motor ability test. Frederic Cozens devised a test of general athletic ability for college men\(^3\). These early tests have served as models for modern test construction.

“"Our Young men must be strong. Religion will come afterward. Be strong my friends, that is my advice to you. You was nearer to Heaven, through football than through the study of Geeta. You will understand the mighty genius and the mighty strength of Krishna better with a little of strong blood in you. You will understand the Upanishads better and the glory of Atma, when your body stands firm upon your feet. What I want is muscles of iron and nerves of steel inside which develops a mind of the same material, as that of which is the thunder bolt made\(^4\).

The very word “Fitness” implies suitability. If a person is fit he must be fit for something. A totally fit person would be free from disease and organic impairment. He would have enough endurance and stamina to


do days work without undue fatigue, participate in wholesome and worthwhile recreation and meet emergencies without in ordinate physical or emotional trauma, such a person would possess not only adequate strength and skill to perform daily tasks efficiently but also the test and vitality to enjoy living and participate in vigorous a activities appropriate to his age and interest\(^5\).

Herber Spencer writes "Vigorous health and its accompanying high spirit are larger element of happiness than any other thing what so ever"\(^6\).

Physical fitness is a positive and a dynamic quality on a continuous from abundant life to death. It is related to the ability to meet the demands of the environment specifically to preserve to with stand stress to resist fatigue and to possess the energy for an abundant life physical fitness is minimal in the seriously ill and is maximal in the highly conditioned person, while energy demands of daily task vary for individuals. Physical fitness is also dependent upon organic fitness as well skill, both of which can be acquired only through a gradual process of training. A certain minimum level of fitness is needed for everyday. But over and above the minimum


level the requirement of additional fitness depends upon the nature of work that the person may have to do.\footnote{V.H. Robert, Physical Fitness The Pathway To Healthful Living (Saint Louis: The C.V. Mosby Co., 1973), p. 22.}

It is learnt that “Physical Fitness” factor was totally understood in a different way by the people and by the different direction. They said that to have a better “off spring” to have healthy citizens parents must be physically fit. So they encouraged the people to keep themselves physically fit, for which they were given more facilities. Several royal rules were made flexed. In order to popularize physical activities once a year, they started to conduct sports fairs, where several types of competitions were organised and the winners used to be honoured. This gradually gave birth to sports. These sports used to be of differing type, where one had to exhibit ones power and strength on one another. Where the physically fit and well build people used to take part.\footnote{K. Sodhi, History Of The Word (Ancient) Part-II, (New Delhi: Vikas Publication, 1952), pp. 128-133.}

Physical fitness is one’s richest possession, it cannot be purchased, it has to be earned through a daily routine of physical exercises.\footnote{Reet, I.M. And A.K. Uppal, Foundation Of Physical Education (Baroda: Friends Publication, 1994), p.289.}
The World Health Organisation has set a target that every person in the World should become health conscious by 2000 AD and it is a right step in the attainment of health for all. The International Olympic Committee has signed an agreement with WHO for furthering the cause of health for all and sports for all by 2000 AD. The agreement is clearly directed towards attaining total fitness of all individuals by 2000 AD. To attain this objective the citizens of the nation are to be made health and fitness conscious and for this purpose scientific programs should be made all ages.

Physical fitness has been defined in many different ways. A physician may define it as the absence of disease. Some athletes may rate fitness according to the amount of musculature developed. Other individuals perceive fitness as the ability to perform certain sports skills. The presidents council of physical fitness and sports had stated that physical fitness is the measure of the body strength stamina, and flexibility, perhaps the most comprehensive definition has been given by the American Medical Association, which defines physical fitness as the general capacity to adopt and respond favorably to physical effort. This implies that individuals are physical fit when they can meet the ordinary as well as the unusual demands of daily life safely and effectively without being overly fatigues, and still have energy left for leisure and recreational activities.

Physical fitness can be classified into two categories: health related fitness and motor skill related fitness. Most authorities agree that from a health point of view total physical fitness involves four basic
components that are separate but interrelated cardiovascular endurance, muscular strength and endurance, muscular flexibility, and body composition (ideal body weight and fat percentage). To improve the overall fitness level, an individual has to participate in specific program to improve each of the four basic components, nevertheless, after the initial fitness boom swept across the country in the 1970s it became clear that just improving the four components of physical fitness alone would not always decrease the risk of disease and ensure better health\(^\text{10}\).

There has been considerable thinking among physicians, physiologists and physical educators to evolve a term, which would indicate the totality of man and his total fitness, involving his physical, mental and social aspects. The term ‘Health Related Fitness’ or Health Fitness’ is now being used frequently to give a better understanding of the concept\(^\text{11}\).

**Components of Health:**

Health is constituted of many components. The basic of these components is the Physico-Physiological qualities required by the body to meet the stress of a given workload. Larson lists such constituents as below:

\(^{10}\text{W.K. Hoeger, Life Time Physical Fitness And Wellness, (Colorado: Mortin Publishing Company, 1986), p. 3.}\)

(1) Freedom from disease: Systems are function without any abnormality.

(2) Freedom from defects: Lack of deviation from the normal structure and function of the human body.

(3) Body Tissue proportions: The bone, muscle, fat proportions for adequate nutrition and well-being.

(4) Muscular Strength: Represents the maximum amount of force developed in a single muscular contraction.

(5) Muscular Endurance: Ability to continue successive movement of muscular strength over an unlimited time span.

(6) Muscular Explosive Power: Ability in the combination of strength and speed of movement.

(7) Circulatory Respiratory Endurance: Ability to sustain long continued physical activity.

(8) Flexibility: Ability in the range of movement-static, or repetition of movement dynamic.

(9) Speed: Number of movements per unit of time (legs or arms).

(10) Agility: Change of position in space.

(11) Balance: Control of body movements.
(12) Co-ordination: Integration of movement patterns (legs, total body, arms and head).

(13) Accuracy: Ability to direct movements with precision. (legs, arms and head).

(14) Rhythm: Ability to direct body movement in relationship to an external force or stimulus.

Factors Affecting Health:

The following factors affect the health of an individual:

(1) Anatomical Factors: In order to be fit and healthy the individual must possess all the body parts essential to the performance of the task and also appropriate body size and shape for the task.

(2) Physiological Factors: In order to be fit and healthy the physiological system of human organism must function effectively to sustain the particular activity that the individual is performing. Since different activities make different demands on the organism relating to neurological, respiratory, circulatory metabolic and temperature, physiological fitness is specific to each activity.

(3) Psychological Factors: Psychological factors like perception, emotional, stability, motivation and intelligence are of vital importance to determine one’s fitness level and health.
Each individual finds his own meanings in his college career. Some will find college a rich and rewarding experience – a base for further exploration. Others will realize only in later years the value of a college education.

The goal and purpose held by a student on entrance to college arise out of a family, school, church, and community complex that has been colored by economic, social and biological influences from birth to the late teens. These goals may be vocational or cultural of romantic or athletic or, more likely, a mixture of all these. What happens to this goals-how they are advanced, lost, or changed—is largely, but not entirely, the product of college experience.

During his college years a student becomes aware-perhaps for the first time-that he, as an individual, is important and that all the agencies of the institution sincerely so regard him. In this honest relationship, the college encourages him to search for a philosophy of life, to be concerned with the meaning of human existence, and to discover values and goals to which he can be devoted.

Whether living at home or in a dormitory, the college student will find the pressures of campus and classroom greater than those of the secondary school, as those of the secondary school were greater than those of the primary grades. From this he may conclude that the additional demands made on him are a tribute to his growing maturity, and that the ability to meet pressures and to overcome difficulties is one mark of a
civilized and well-balanced personality. He will surely learn, if he does not already down, that health and vitality are precious assets now and that they will continue to be in the years lying ahead. Since health, strength, and vitality are important to the realization of purposes, they are necessarily a part of the process of self-realization of purposes; they are necessarily a part of process of self-realization. But health is not merely a matter of private concern; its overtones are always social. The body politic, in order to thrive, must have within it healthy and purposeful individuals who, by participating in the life around them, fulfill their own goals and contribute to the well being of their society.

In the early days of free public school education, parents and teachers become aware of the fact that children suffered physical harm when they were required to sit quietly at studies for several hours a day. Eventually, physical education was added to the curriculum. This arrangement, however beneficent in purpose, was inadequate to protect the health of school children because epidemics of communicable diseases invaded the schools, simple hygienic practices were unknown or ignored, and proper measures for the development and maintenance of health were lacking. Consequently, instruction in health was provided. This consisted of very elementary practices, such as how to brush the teeth, how to avoid constipation, getting plenty of fresh air, and similar items of personal hygiene. For many years the same sort of subject matter comprised the content of “health instruction” college.
Today, however, health education at the college level must consider problems of health that have issued out of the tremendous social, economic, and political changes of the twentieth century. These changes and their health implication must be examined if modern man is to thrive, remain strong and vital. However, knowledge about value in knowing how to live if the knowledge is not practiced, and the loss of health comes more from failure to follow health precepts than from lack of knowledge about them.

In its constitution, the world health organization claims as a fundamental right of every human being the “enjoyment of the highest attainable standard of health.” For college students in the United States today, the attainment of maximum health is more than a right. It is an obligation, which every student owes to the society, which has endowed him with superlative opportunities to achieve and enjoy good health.

As college students face adult life, they have every opportunity to maintain good health. In all the years before college they have been housed, clothed, and fed, protected against communicable disease and other health hazards, given medical and dental supervision and care, and taught the essentials of healthful living. Research adds almost daily to man’s knowledge about himself. Health information is available through innumerable channels of mall communication. Health insurance plans bring health services and hospital care within the reach of the average citizen. Never before has interest in health been so great. But what exactly is health?
Health is a quality of the whole person in which the structures of the organic systems perform their functions efficiently to promote growth, to supply energy, and to sustain life. Health is infinitely complex and highly variable under different conditions. It is not a static state, which, once attained, endures forever. It is profoundly influenced by emotional and social factors. Both heredity and environment determine its development. And it responds to intelligent care and behavior.

The Medical Examination, perhaps the most important measurement in the health-education program, must, of necessity, be performed by a competent physician, who should consider the examination to be not only an effort to detect disease but also a part of the program of education. Among the functions of the medical examination may be included the following: (1) to detect indication of conditions that may impair the health of the person or hinder his development, and to prescribe appropriate remedial measures; (2) to check the progress of the retrogression of the physical status of each person year by year in order both to serve the person himself and to indicate one aspect of the educational efficiency of the institution; (3) to detect defects that may lead to severe physical disorders and to prescribe appropriate remedial measures to avert the disorders; (4) to detect and to eliminate and/ or to correct such handicaps as defective vision, adenoids, focal infections, and defective hearing in order that the general-educational efficiency of the institution may be raised; (5) to serve as a partial basis for the admission of students to institutions with limited enrollments; and (6) to detect by daily inspection, if at all practicable, in the elementary and the secondary schools, indications of infectious disease.
The type of blank used for recording the results of a medical examination depends in part upon the preferences of the physician and in part upon the time that can be given to the examination. If the examinations are cursory, lasting about five minutes for a person, the examiner cannot, from twenty to thirty minutes for each person. The Health Examination: Sample Score Card given by Charles\textsuperscript{12} is not intended to be a model may be scored somewhat objectively.

The purpose of scoring the medical examination is not only to increase the efficiency of the examination from the standpoint of the examiner but also to increase its motivating power from the standpoint of the person examined.

Terms to the person examined and to the parents of the person examined, the experience of school physicians has been that little is done to correct the defects indicated. If the results of a medical examination are expressed in somewhat objective terms and then scored, the person examined, the parents of the person examined, and the non-medical administrative officers (the school nurse, the teacher of physical education, the chairman of the health committee) are motivated in a definite way to undertake remedial measures. If each physician uses his own code in recording the results of an examination, the results are meaningful to him but probably not to anyone else attempting to use the results, and the results

obtained by one physician cannot, for the purpose of comparative statistical studies, be combined with the results obtained by another physician.

The first part of the card concerns a personal medical history. The purpose of the history is to provide the examiner with a background for arriving at proper conclusions as to interpretations of other phases of the examination; that is many of the diseases indicated in the history have common squeal. Each item should be carefully explained by a physician or by a qualified layman. In the upper grades the pupils under the direction of the teacher then fill in this part of the blank may. In the lower grades it probably has to be filled out by a parent, who should, if possible, be present at the time of examination.

The items in the scoring blank presented in the text were selected on the basis of a statistical study of seven hundred very complete histories of college students. In the analysis of these histories many items were found which should, theoretically, be productive of much useful information but which did not give any pertinent information whatsoever. The items that were retained for the blank in this text met the following criteria: (1) reliable information about the item can be provided by the person being examined or by his parents; and (2) the information relative to the item can be of service to the physician in the diagnosis and/or in further aid to the person being examined. Items that were significant statistically only were not included in the blank.
If a code is used for the scoring of the medical examination, the results can be expressed with a fair degree of uniformity. It is strongly emphasized, however, that such uniformity was attained only if the physician is sufficiently interested to study the scoring method carefully and to attempt to utilize it consistently. In studies of the code for scoring suggested in this text, the reliability of the scoring has been as high as the reliability of the procedures of the examination. The scoring device is such that the physician who has neither the time nor the inclination to go into the matter in great detail may still use the code with fair accuracy. This statement should in no wise be interpreted to mean that the physician who wishes to record his findings in great detail should not do so.

The suggested code is as follows: no evidence of any defect = 0; corrected defect (e.g., adequately removed tonsils, vision corrected by refraction) = 00; suspicious findings, but no conclusive evidence of a present defect = ?; item not examined = W; minor defect (e.g. slight pit cavities in the teeth, 20/30 vision, slightly enlarged but not infected tonsils) = 1; minor defect requiring further examination and treatment = 1X; defect of moderate severity = 2; defect of moderate severity requiring further examination and treatment = 2X; defect of great severity = 3; defect of treat severity requiring further examination and treatment = 3X. If the examiner is not sure as to whether a defect should be scored 1 or 2 the defect may be scored 1.5; whether a defect should be scored 2 or 3, 2.5.

The method of scoring is a simple one and is not presented to be an adequate basis for details of treatment. However, recommendation for
details of treatment are not generally, according to the statements of numerous school physicians, based on what can be recorded in the short time given to such examinations in the schools. The important thing in a school examination is that the defects be found and referred to the proper medical authorities. The physician treating in the condition subsequently, even though he is the same person who conducts the original examination, makes an unhurried and a detailed examination before he prescribes treatment. For example, if a physician finds numerous roils in the lungs, he marks the condition 2X or 3X and does not at the time of the examination need to spend further time upon a detailed analysis, which is left to the physician to whom the case is referred. If a physician finds tonsils enlarged about halfway from their normal condition to the midline, he marks the condition 2X, indicating that the throat should be examined in detail later by a competent specialist.

After each of the defects listed in the scoring blank is number in parentheses for indicating the approximate importance of the defect. These weightings were based on a consensus of a large number of practitioners of internal medicine. A defect of the lungs, for example, has a weighting of 10. If the lungs are marked with a 2, then the score for the condition is 20 (i.e., 2x10). Infected tonsils have weighting of 3. If this item is marked with a 3, the score is 9 (i.e., 3X3) some items may appear to have too low weightings. Such defects, however, are generally accompanied by other defects, with the result that the total score is high; for example, pulmonary tuberculosis, which has a weighting of 10, is usually accompanied by such defects as poor posture, poor muscular development, underweight, and enlarged glands.
Some items, such as pyorrhea, are given high weightings because they are not usually accompanied by other defects or because they are difficult to cure. Other items such as adenoids are given low weighting because they are easily remedied.

The health score is 100 minus the disease score. A health score of 60 is considered to be a “failing score.” It has been found that persons are more likely to undergo remedial measures if they are told that their health is a certain parentage, for example 62 percent, of what it they are what it should be, than if they are just told what defects they have this finding is especially in evidence if the persons are encouraged to have the correction made and to have their health re-scored, for no deduction is made from the health score for defects that have been corrected.

The result of the examination may be expressed graphically by the use of horizontal lines under the code numbers indicating the severity of headed by the number corresponding to the code number assigned to the defect; hence the severity of the defect is represented by the length of the line. In the scoring blank in this text the horizontal lines are in heavy black, but it is suggested that red lines would be more effective than the black lines.

Too much activity can be as detrimental as too little. It explores not only the rewards of regular exercise but also the potential risk associated with certain activities. One can learn to balance and moderate your exercise needs. The answer is simple-listen to your body. Whenever joint and muscle problems develop. Your body communicates with you through such
symptoms as pain, swelling, stiffness, noise and instability. These symptoms can come from many sources and should signal you that irritation and injury are occurring.

- Why is it important to listen to your body?
- How does your body communicate with you?
- Who can you turn to for professional help?
- What can you expect to receive from your physician or health care provider?

Athletes around the world who have experienced a sports injury immediately look outside themselves for a solution to their concerns, but their first step should really be looking and listening to their own bodies. Your body is talking to you—are you listening? Your body is telling you that there are wonderful rewards and some risk when you exercise regularly. By learning how to interpret your body’s signals you can work with your health care provider to design a treatment program that will respond precisely to your body’s needs. Or you can purchase volatile options in the futures market, which can pay tremendous sums. But you risk losing all your money. Somewhere in between, the cautious investor buys prudent stocks and bonds for long-term growth and stability.

Most of us seem to understand the concept of money management but have trouble understanding “body management” when it comes to choosing activates. The risks of poor money management are sometimes very clear—bankruptcy, poverty, extreme loss. We sometimes forget the risks
of poor body management. We rarely think about the possibility of pain and disability that may accompany sports injuries unless an injury happens to us.

Although one is involved in sports activity, because he knows some of the potential rewards, occasionally reminding himself of these rewards may keep you motivated. The rewards of physical activity are many:

- Prevention of musculo-skeletal injuries by maintaining muscle tone
- Improved flexibility and range of motion
- Prolonged physical and mental health
- Improved cardiovascular endurance
- Improved positive feeling of "good health"
- Opportunity to learn new skills
- Opportunities for friendship and socialization
- The fun of games
- Team membership
- For a few a career an opportunity to earn "big money"

This list can go on, but it helps explain why sports are such an important part of our culture. Yet we sometimes lose sight of the fact that millions of people become injured and that some injuries lead to complication, even though most injuries are minor. Some of the specific complication that may result are minor musculo-skeletal injury followed by a brief period of disability; major bone and joint injury, which may lead to chronic pain or arthritis; financial losses because of time spent recuperating
and because of medical expenses; and mental depression, which occasionally may become severe.

The athletes must decide whether the rewards of your particular sports activity outweigh the potential risks. Younger athletes sometimes have a hard time with balancing rewards and risks because they tend to focus on the rewards and deny the risks. Many teenagers. "Live for today," which is why pregnancy, AIDS, smoking, and drugs can become such problems. Teenagers frequently deny the risks inherent in dangerous behaviors. But they can also deny the risks involved in positive behaviors such as sports activity. Because of their experience, older athletes are more aware of risks and approach the rewards more realistically.

Complications develop with the extremes. Too much activity may result in injuries leading to some of the problems mentioned earlier, while inactivity can lead to

- Weight gain,
- Loss of muscle mass,
- Loss of bone strength (particularly in women who are prone to developing osteoporosis),
- Mental inactivity leading to depression, and
- Loss of cardiovascular conditioning.

Mature judgment can lead to the appropriate level of activity. It is no surprise that these potential in particular confuse young athletes risks and
rewards associated with too much or too little activity. Achieving balance is the goal, but how? The answer is simple-listen to your body.

Our bodies have evolved with a wonderful mechanism for letting us know when we are experiencing increasing aches and discomfort in a muscle or joint, your body is telling you to moderate, reduce activities, rest a while, and change your activity. The worst thing you can do is ignoring the pain. And change your activity. The worst thing you can do is ignoring the pain. This will only aggravate the problem and cause increasing difficulty with healing.

Athletes should realize that every activity has a reward/risk ratio. Generally in life, the greater the reward the greater the risk. A key step for every athlete is to realize why we exercise. Younger athlete is to realize why we exercise. Younger athletes generally focus on the competitive national competition. The famous football coach Vince Lombardi said. “Winning is not everything-it is the only thing” This quotation generally reflects the viewpoint of the professional athlete. At the professional sports level, with billions of dollars at risk, winning is certainly everything. This emphasis on winning is transmitted to most athletes; even those not involved in professional competition, and can eventually lead to musculo-skeletal injuries.

Unless our are a professional athlete, you may discover more benefits in exercising if you focus on factors other than winning, factors such as having fun and becoming physically fit. You will also find sports
activity more satisfying if you are continually aware of the potential for injury. It is amazing how cautious you will become after you have experienced your first sports injury. Once you learn to listen to your body and become aware of the signals your body gives, you were able to avoid many potentially serious injuries and successfully manage injuries once they occur.

Being in tune with how your body is reacting to activity is important to all athletes. Just as with most new activities, learning how to listen to your body takes experience and practice; however, once you learn how to understand what your body is telling you, it becomes easier all the time. After all, no one knows your body better than you do.

**Listen To Your Body:**

Your body communicates with you in various ways when joint and muscle problems develop. Pain, swelling, stiffness, noise, and instability are the most common ways your body tells you that something is wrong. Let’s look at these symptoms in more detail so you were aware of them when they occur.

**Pain**

Think of pain as simply your body’s way of telling you (signaling) that injury and irritation are occurring. Pain can come from many sources. It may be due to a buildup of chemicals (such as lactic acid) to stimulate certain nerve fibers in the muscles. Pain may be due to a mechanical cause
such as general wear and tear on the body, or it can be caused by inflammation or irritation of the lining of a joint. Whatever the cause, there are basically three types of pain—vague, localized, and delayed.

**Swelling**

Swelling is the accumulation of fluid around of inside a joint or muscle. This is the body’s initial way of healing and is also known as the “inflammatory process.” The body is trying to bring blood products and fluid to fight the injury and cleanse the injured area. Sometimes the swelling and the inflammatory process cause more problems than the initial injury; however, keep in mind that some swelling is necessary for healing to take place. For practical purposes, consider that a little swelling might be fine, while too much is not good and should be suppressed with anti-inflammatory treatment.

**Stiffness**

Stiffness can come from inside a joint and can be due to swelling, a torn cartilage, or arthritic spurs in an internal joint. Stiffness can also be caused by factors outside the joint; inflamed or tight muscles of tendons are frequent sources of such stiffness. Generally, stiffness without local pain in the joint is probably a result of muscle injury of muscle inflammation and does not imply a serious problem. Stiffness associated with local pain, though, implies a more serious condition.
Noise

Noise or snaps in the joint can be very confusing. Listening to noises and interpreting them correctly is very important. If the noise of snap is associated with local pain, this generally indicates a potential problem. Noise can be caused by a roughness of the joint surfaces known as chondromalacia or by an irritation of the joint associated with osteoarthritis of torn meniscus; however, in the hip or ankle, the noise can be produced by the simple movement of a normal tendon gliding over a normal bony protrusion and causing a snap.

As a rule of thumb, you should moderate those activities that cause a joint to snap. Even if there is no initial pain, persistent snapping and irritation can lead to roughness and eventual tendonitis. If the joint produces a noise but no pain stiffness, or swelling, then the noise can generally be monitored without any major change in activity; moderation should be the key.

Instability

Joints are held together with muscles and ligaments. Some joints, such as the shoulders or the knees, are inherently unstable. Other joints, such as the hips are much more stable. Joint instability or “giving way” can be the result of two different problems. One involves the internal knee joint or ligaments inside or around the knee, for example, the anterior cruciate ligament. The other problem may involve factors in the muscles around the joint—for example, a weak thigh that causes the knee to give way.
Giving way and instability can be serious problems and should not be ignored. A health care provider should carefully assess giving way, even without pain. At first, instability should be treated by simply restricting those activities that cause it, working on building muscles around the joint, and carefully evaluating and treating the joint factors, such as a torn ligament or a loose body within the joint.

As much as you need to be responsible for your own well being, you also need to be able to work with health professionals who have the experience and knowledge to guide you in the right direction. There are many health care providers who can help you. Including physicians and other professionals who practice the relatively new specialty of sports medicine. With so many specialists and so much help available, the injured athlete and consumer can be very confused when you are injured, whom should you contact for help?

**Health Symptom:**

It has been said that the American health system is not in business for people’s health. Health and other social issues are simply given a low priority, being preempted by military and foreign policy commitments. There are some evidences, however, that this situation was rectified in the not-too-distant future. The spiraling costs of medical care alone have forced the American people to begin to ask questions and to demand answers. They are becoming less tolerant of exorbitant hospital bills, increasing cost and inadequacy of health insurance, and the prohibitive costs of essential
prescription drugs and prosthetics. People are gradually becoming aware of what health educators have known for years: health education and preventive health care are the most cost-effective approaches to our health care dilemma. We simply cannot afford to get sick, at least not as much as we could in the past. The American economy cannot continue to pour billions of dollars into treating afflictions while ignoring the fact that most of these can be prevented. What is needed is a health care system that directs its attention more to the promotion and maintenance of health than to the potential profits inherent in treat in the sick. Also needed is a health education system that tells people that they don’t have to get sick as often; that good health is an achievable condition for many people most of the time; that it is more efficient to stay well than to become ill; that they don’t have to tolerate exorbitant medical, hospital, and drug prices; and, above all, that they can do something to change the nation’s priorities and attitudes towards health care.

The methods used to improve individual and societal health are promotion, maintenance, and restoration, and depend for their success upon the behavior of the individual this is the common denominator. The fundamental factors that control how well one’s health is promoted are (1) the quality of the individual’s genetic potentials, and (2) the quality of the environment in which the individual lives. These two factors heredity and environment influence and are influenced by the life-style of the individual. Some hereditary potential will develop more or less automatically, and can be positive assisting in the promotion of health as they develop, or negative,
resulting in a defect that may interfere with health promotion to varying degrees, depending upon the nature of the trait.

The quality of the environment is extremely important, for it can encourage the expression of desirable traits and in many instances, discourage the expression of undesirable traits. Further, the behavior of the individual can have a direct bearing upon the degree to which the environment can well affect positive growth or the expression or development of an unhealthy condition. For example, all people inherit the potential to develop scurvy, but it can be prevented by the simple procedure of ingesting sufficient amounts of vitamin C daily.

The maintenance of health is very closely associated with health promotion, but there are some distinct differences. Health maintenance can be considered a sub-category of health promotion, for, obviously, if health is promoted—if one reaches a level of optimal functioning a certain degree of health maintenance has been achieved. However, it is possible to achieve a level of optimal health but fail to sustain it. In this regard, health maintenance is defined as those measures one takes to insure that an optimal level of health continues. These measures can take the form of daily. Actions necessary to maintain health, such as adequate diet, physical activity, rest, recreation freedom from undue emotional stress, of taking advantage of health technology—having periodic health checkups, receiving necessary immunizations, etc. the former activities are referred to as “health-related” behaviors and the latter are “health-directed” behaviors. Note that health maintenance is dependent entirely upon the behavior of the individual, while
health promotion is significantly affected by genetic factors that may or may not be controllable.

Actions to restore health take place after attempts to promote and maintain health have failed. The success of health restoration measures is dependent upon (1) the quality of the individual’s health knowledge and the motivation to act accordingly, (2) the quality and availability of appropriate health services, and (3) the individual’s motivation to accept new behavior patterns necessary for recovery of rehabilitation and for preventing a relapse (health maintenance). For example, a person who has suffered a heart attack needs immediate medical attention. Availability of this attention is obviously extremely important for recovery. But in addition to this, the individual will have to learn to avoid those factors in the future that are associated with the onset of the heart attack. It might be necessary, for instance, to lose weight, stop smoking, change physical activities, or avoid emotional stresses. These latter activities, although a part of the rehabilitative process, are also examples of the kinds of health education that concern patient health educators.

In summary, education for health is an important influence on health behavior. Health behavior is associated with each person’s style of living. One’s style of living is the chief factor in the success of the three approaches to health-promotion, maintenance, and restoration. The urgency for directing our attention to the promotion of health and the prevention of disease is substantiated by the prohibitive costs of treating illness after it has occurred.
Many of our current health problems are unnecessary, at least to the extent that they occur. It is unrealistic to think that we can eliminate all preventable health problems with existing resources, but it is realistic health educators. School and community agency administrators at all broad-based commitments to be made, directing attention toward the causative factors associated with these health problems and the means for preventing them. These factors include heredity, adverse environmental forces, individual emotional inadequacies, social impingements upon the individual’s freedom to function adequately, the individual’s acquisition of health misconception, of self, others, and the world in general.

**Health Education:**

Health education can play a significant role in alleviating many of the preventable health problems. It must, however, direct its energies and resources toward educational approaches that will result in each individual accomplishing the following objectives:

1. Developing basic decision-making skills necessary for dealing adequately with daily living problems.

2. Understanding the complex environmental forces that can interfere with normal growth and development and taking steps to avoid these when possible.

3. Developing a sense of self-sufficiency and recognizing that limitations are inevitable at times.

4. Acquiring insight into personal values and developing an appreciation for those of others.
5. Developing the skills necessary for changing of overcoming environmental hazards and social constraints on self-expression.

6. Understanding the nature of the health care system and developing the skills necessary to make the most effective use of it for personal growth and development and health maintenance.

7. Developing primitive health-related behavior or life-style.

Today's health education should be viewed as a pioneering effort that recognizes the scope of preventable health issues, the potential resources available, and the need to deal with the urgent health problems in the context of promotion and maintenance of health, prevention and treatment of disease, and rehabilitation of the disabled. The goals of health education must be based upon the needs and capabilities of individuals and the factors that influence their development. This is the only available, logical and economical solution to our present health care dilemma. It has become obvious that for positive change to take place, several things are necessary.

- Health education must become recognized as a fundamental and functional component of the health care system. It can no longer remain isolated from all health care system. It can no longer remain isolated from all health and medical activities.

- Health care must change from a disease orientation to prevention orientation. The medical profession, especially, must change from a chiefly pathologically oriented profession to a preventive-oriented one.

- The establishment of health education centers must improve the training of health professionals.
• Health education must extend beyond the confines of the school and into the community and society. There must be a school/community interaction and coordination in all matters concerned with health. Health educators, medical providers and other health providers must begin to interact effectively.

• Individuals must be provided with learning experiences that are meaningful and pertinent to the issues they control. Their resulting be heavier will contribute to a reduced incidence of disease.

• The massive quantity of health information must be organized in such a way that it is readily available to each individual, group, and educational or research institution.

In conclusion, health education must be thought of as one of the chief means of influencing human effectiveness. It is imperative that people be provided with opportunities to acquire the accurate health information necessary for making intelligent choices about the behavior best suited for promoting health and preventing disease, disability and through the establishment and implementation of comprehensive health education programs. These must be sequential and progressive; based upon the interests, needs and capabilities of the learner; taught by properly trained health educators; appropriately organized and administered; and suitable for both the health care system and the nature of the community in which the learner lives.

Our health problems was solved only when educators, community leaders, and medical and other health professionals recognize the need to
work together in all deliberate, planned, and coordinated effort to promote and maintain the health of each individual, and coordinated effort to promote and maintain the health of each individual. Traditional approaches to health education have emphasized disease rather than health, the teaching process rather than the learning process, teacher-centered rather than student-centered activities, passive rather than active learning, cognitive development rather than behavioral development, and symptoms of diseases rather than ways to control or prevent disease. In addition, health education has been confined to the classroom with little or no attention paid to the total community of the real health issues. For example, nearly every health curriculum guide and textbook devotes much of its content to discussing the characteristics of health problems that cannot be prevented, controlled or even treated. Much space so frequently devoted to rare conditions that are unheard-of interest of rather a small percentage of students; an in-depth study of them will do little to improve the health status of the learner.

More attention must be given to the health needs, interests, and capabilities of the learners and to the health issues over which the individual has some control. If this is not done, health curricula and textbooks will remain essentially irrelevant: The use of such materials will only cause intellectual boredom and a decrease in motivation. But more importantly, the preventable health problems will continue to plague, disable, and kill people unnecessarily.
What is the health status?

If health status were to be placed on a continuum, we would find that functioning abilities would extend from near zero (death) to the opposite extreme of maximum output. For those with progressive degenerative diseases, the rate at which functioning becomes impaired can be decreased with proper treatment, especially if it is begun early enough. Most healthy people will from time to time contract conditions, which are temporary of curable. Their ability to function may be hampered for a while, but with adequate treatment, health will return. Although many individuals may have a disability of disease, which cannot be cured, in most cases their ability to function can be improved through treatment and rehabilitation. Therefore, health status may be defined as the level of functioning of the individual at any given moment.

The world health organization’s definition of health as a state of completed physical, emotional and social well-being, not merely the absence of disease or infirmity, may be added to this concept as an ideal goal to be achieved. However, optimal health is more accurately described by the World Health Organization’s objective as “the attainment by all people of the highest possible level of health.”

Health education should direct its energies not only toward those who are well, but also toward those who are undergoing treatment for disease or disability, since they can learn to avoid in the future those factors which caused or contributed to their condition. Education is often essential in
helping these individuals alter their life-style to accommodate the permanent
disability they may have acquired as a result of the disease.

Health status is determined by and dependent upon a variety of
interrelated and interaction factors. These include, in addition to the
multiple causations of ill health discussed earlier, the effectiveness and
availability of the health care professionals, facilities, and programs. In
addition, knowledge of the essential health information is necessary in order
to behave appropriately during ordinary circumstances, as well as in times of
crises. Some authorities presume that health status can be improved mainly
through periodic physical examination, diagnosis and early treatment of
disease. It is pointed out, however, that “while we are to a greater extent
looking outward to the community for means of attaining and maintaining
health status, we have by no means outgrown our need for personal
health responsibilities. Advances in the health sciences make it important for
the individual to keep informed of these developments so that he may
modify his behavior in accordance with their findings.”

As more and more people become unnecessarily ill and
incapacitated by essentially preventable diseases, the demand for effective
preventive measures will grow. Such health problems as cardiovascular
diseases, lung cancer, drug abuse, alcoholism, and obesity, for example, are
caused primarily by inappropriate individual behavior. The motivation for
much of this behavior can be traced to the impact of social and physical
environmental forces, which initiate and perpetuate fallacies and
misconceptions regarding a variety of health issues. These can be found for
example, in food, drug and tobacco advertisements. Treatment approaches alone will not solve even our most basic health problems; they are expensive and time-consuming, but more importantly, they are failing to reduce the incidence, as well as the disabling effects, of these health problems. For example, the vast majority of lung cancer cases could be prevented if people would merely stop smoking cigarettes; many cardiovascular diseases could be prevented through a change in physical activity, dietary habits, and smoking behavior. These two diseases account for more than half a million deaths each year in the United States. The problem is compounded by the unknown amount of suffering and disability associated with the diseases.

Such health crises exemplify the failure of the therapeutic approach to solve many of our health problems. Society can not continue to build more hospitals without giving adequate attention to the causes of these critical health problems for instance, by the time lung cancer can be diagnosed, it has progressed to the stage where treatment is generally ineffective in the vast majority of cases. As Rathbone and Rathbone have said: “traditionally we have concerned ourselves with disease after it has developed. So much energy goes into plugging holes in the dike that no attention is given to building a better dike.”

Similarly, the education community cannot continue to stress academic achievement without giving equal emphasis to the basic health issues. A child withdrawing from heroin has little use for grammatical correctness; an adult cigarette smoker gasping for breath from emphysema will find little consolation in Shakespeare.
The educational community must reevaluate its priorities and start emphasizing those fundamental issues, which was most valuable in teaching how to live in a society fraught with health hazards. This does not mean that that other area of the curriculum should be abandoned. It does mean that health education must be put in its proper place in the school curriculum so that today’s children was better prepared to avoid the vast numbers of preventable health problems prevalent today and predicted for the future. This is of equal importance for the health education of adults in the community.

We must begin to prepare people to assume more responsibility for their own health as well as for the health of others. Each individual needs to become aware of the technological factors that affect air and water pollution, the activities of industries that are more concerned with profit than with human health, and the activities (or inactivity) of government. Obviously, the real causes of our major health problems go deeper than individual health behavior; they lie in the numerous environmental obstacles preventing us from behaving healthfully persuading us to behave in ways that contradict our intellect.

What is optimal health?

Optimal health is attained when a person is functioning at the highest level possible under a given set of environmental circumstances. In this sense, optimal health wills very depending upon the complexity of the environmental constraints existing at the moment and the individual’s
capabilities for dealing with them. This can be as simple as the biological ability to resist disease of as complex as the ability to cope with psychological or sociological frustration, stress, and anxiety.

Although health can be improved at nearly any status level, the most logical point at which to promote optimal health is prior to the onset of disease and during the early formative years. The health education program should provide the basic health knowledge necessary to choose a life-style that can result in a better life and ultimately, a better society. The sooner effective health education is begun, the more likely it is that individual attitudes and behavior was positively affected. This will, in turn, result in a reduction of disease and disability and in an improvement in society's total health status. The enormity of the task confronting health educators is obvious.

**How can optimal health be attained?**

Our health affairs can best be dealt with by recognizing the interrelatedness of the physical, social, and psychological factors affecting health. Both personal and environmental factors must be given proper attention in any health education program, whether school or community based.

Life expectancy figures have for many years been recognized as valid, significant indicators of individual and societal health status. However, it is much more important to determine how well people function and how they contribute to society than to determine health in terms of
longevity. Each individual needs to understand and apply the factors that aid functioning and avoid those that interfere with personal effectiveness.

For those who are essentially healthy the process is fundamentally one of learning how to live most effectively (health-related behavior). However, for those individuals who have a disease or disability, the process is much more complex. These individuals must acquire the knowledge necessary to understand their personal limitations and how best to develop their positive potentials. In addition, each person must learn when and where to seek competent health advice and care i.e. health directed behavior.

**STATEMENT OF THE PROBLEM:**

Health status is a state of complete physical, mental, social and emotional of an individual. It differs from individual to individual, from situation to situation, from habit to habit and from many factors. Involvement in the physical programmes is one of the important reasons of different in health status. In colleges some girls show their interest in physical activities and gain better health. It has been a trend in the colleges that very few girls students take active part in the programmes/activities run by the department of physical education. Hence their health status is found to be different. To confirm the same scientifically the present study is proposed. In order to achieve this objective the problem is stated as “Health Status Of Active And Non-Active College Girls Of Amravati University And Its Correlation With Some Physiological Parameters”. 
PURPOSE OF THE STUDY:

The main purpose of this study was to study the Health Status of Active and Non-Active College Girls And It’s Correlation With Certain Physiological Parameters. The allied objectives were:

i. To compare the Pulse Rate of Active and Non-Active College Girls of Amravati University.

ii. To compare the Systolic Blood Pressure of Active and Non-Active College Girls.

iii. To compare the Diastolic Blood Pressure of Active and Non-Active College Girls of Amravati University.

iv. To compare the Haemoglobin Percentage of Active and Non-Active College Girls of Amravati University.

v. To compare the Health Problems of Active and Non-Active College Girls of Amravati University.

vi. To survey the Medical Expenses of Active and Non-Active College Girls of Amravati University.

vii. To find out the relation of health status with certain physiological parameters.
SIGNIFICANCE OF THE STUDY:

The need of the present study was argued on the following grounds:

i. The study will provide the Health Status of Active and Non-Active College Girls of Amravati University in Maharashtra.

ii. The study will further indicate the status of different parameter of the study of the Active and Non-Active College Girls of Amravati University.

iii. The study will bring into light the physical fitness level of the Active and Non-Active College Girls of Amravati University.

iv. The study will bring forward the relationship of health status with certain physiological parameters.

HYPOTHESIS:

It was hypothesised that there would be significant difference in the health status of Active and Non-Active College Girls of Amravati University. It was also hypothesised that the relationship of health status with certain physiological parameters would be more in case of Active College Girls than Non-Active ones. The sub-hypotheses were:
1. There would be significant difference in the health status of Active and Non-Active College Girls of Amravati University in Height.
2. There would be significant difference in the health status of Active and Non-Active College Girls of Amravati University in Weight.
3. There would be significant difference in the health status of Active and Non-Active College Girls of Amravati University in B.P. (Systolic).
4. There would be significant difference in the health status of Active and Non-Active College Girls of Amravati University in B.P. (Diastolic).
5. There would be significant difference in the health status of Active and Non-Active College Girls of Amravati University in Bicep.
6. There would be significant difference in the health status of Active and Non-Active College Girls of Amravati University in Tricep.
7. There would be significant difference in the health status of Active and Non-Active College Girls of Amravati University in Sub-Scapula.
8. There would be significant difference in the health status of Active and Non-Active College Girls of Amravati University in Suprailliac.
9. There would be significant difference in the health status of Active and Non-Active College Girls of Amravati University in Thigh.
10. There would be significant difference in the health status of Active and Non-Active College Girls of Amravati University in Calf.
11. There would be significant difference in the health status of Active and Non-Active College Girls of Amravati University in Medical Expenses.
12. There would be significant difference in the health status of Active and Non-Active College Girls of Amravati University in Body Mass Index (BMI).

DELIMITATIONS OF THE STUDY:

The present study was delimited to the following factors:

i. The study was delimited only to the Amravati University of Maharashtra.

ii. The study was delimited only to the college girls of the Amravati University.

iii. The total number of college girls 600 Active and 600 Non-Active girls were there.

iv. The subjects were from co-educated colleges.

LIMITATIONS OF THE STUDY:

The limitations of the study were as follows:

i. Extra curricular involvement of the subjects was not being considered.

ii. Nutritional factors were unknown to the scholar.

iii. The Socio-Economic-Status of the subjects were different.

iv. The time for conducting the test was different.
OPERATIONAL DEFINITIONS:

The terms used in this present study were with the meaning explained through the definitions given below:

Physical Fitness: “Physical fitness is the ability to carry out daily task with vigour and alertness without undue fatigue with ample energy to engage in leisure time pursuit and to meet unforeseen situation and unexpected emergencies.”

Health Status: Health Status is the state of an individual, which show a complete state of physical, mental, emotional and social balance.

Active Girls: Girls who take active part in the physical programmes conducted by the Dept. of Physical Education of the college.

Non-Active Girls: Girls who do not take active part in the physical programmes conducted by the Dept. of Physical Education of the college.

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