

## UNIT-I

### LESSON PLANNING

#### Meaning of Unit Plan/ Lesson plan

A proper planning of the lessons is key to effective teaching. The teacher must know in advance the subject matter and mode of its delivery in the class room. This gives the teacher an idea of how to develop the key concepts and how to correlate them to real life situations and how to conclude the lesson. Lesson planning is also essential because effective learning takes place only if the subject matter is presented in an integrated and correlated manner and is related to the pupil's environment. Though lesson planning requires a hard work but it is rewarding too. L.B. Stands conceives a lesson as 'plan of action' implemented by the teacher in the classroom. **According to G.H. Green,** "The teacher who has planned his lesson wisely related to his topic and to his class room without any anxiety, ready to embark with confidence upon a job he understands and prepared to carry it to a workmanable conclusion. He has

foreseen the difficulties that are likely to arise, and prepared himself to deal with them. He knows the aims that his lesson is intended to fulfill, and he has marshalled his own resources for the purpose. And because he is free of anxiety, he will be able coolly to estimate the value of his work as the lesson proceeds, equally aware of failure and success and prepared to learn from both”.

Lesson Planning thus in a true sense, represents the task of theoretical chalking out of the details of the journey which a teacher is going to perform practically along with his students for the realization of some specified instructional objectives in a specified school period. Thus in a lesson plan/unit plan we have planned that which is to be taught by the teacher. It is planned in a methodical way by writing a less plan related with a particular unit of his subject.

A unit consists of many lessons and will be taught for a longer period, for example, a semester. Planning a unit is also a longer process compared to planning a lesson. This is usually undertaken by a sectional head or head of the department and involves discussion with teachers. A unit plan is also important

to show the main goals of a study unit and how lessons, evaluations and practical sessions connect to achieve the unit goals. Hence, unit plans are often used for discussions for syllabus reviews as well to explain the skills, knowledge that students are expected to acquire towards the end. A unit plan usually consists of the vision/unit goals, unit content in detail; time allocated for the completion of each stage, how lessons/stages are designed to realize these goals collectively, pre and post-tests and cross-curricular connections, etc.

**Unit Planning/Lesson Planning** is a critical skill needed by professional educators. It is the core of the instructional process, the avenue or "road map" by which students succeed and learn within the classroom. Without appropriate lesson/unit planning skills, teachers and students have no idea of where they are headed in the learning process. Many of the school districts in which students are placed in field experiences have adopted lesson/unit planning templates and processes. Students are asked to examine these and use them appropriately within their field experiences.

- **Good lesson planning** is essential to the process of teaching and learning. A teacher who is prepared is well on his/her way to a successful instructional experience. The development of interesting lessons takes a great deal of time and effort. As a new teacher you must be committed to spending the necessary time in this endeavor.
- **Planning ahead** to identify a course of action that can effectively help learners reach their goals and objectives is an important first step in effective instruction. Lesson planning communicates to learners what they will learn and how their goals will be assessed, and it helps instructors organize content, materials, time, instructional strategies, and assistance in the classroom.
- A great deal of your **effectiveness as a teacher** has to do with your ability to design and implement instruction that promotes learning. A lesson plan, which is a (more or less) detailed plan of the goals and activities for a particular class, is an important part of this process. Creating a lesson plan is when you consider how to organize and achieve some of the goals and objectives you outlined as you planned the course.

### **Importance of Lesson Planning:**

**1. A creative Process:** Lesson planning is at the heart of being an effective teacher. It is a creative process that allows us to synthesize our understanding of second language acquisition and language teaching pedagogy with our knowledge of our learners, the curriculum, and the teaching context.

**2. Analyze learning Experience:** It is a time when we envision the learning we want to occur and analyze how all the pieces of the learning experience should fit together to make that vision a classroom reality.

**3. Gives opportunity to teachers:** Lesson planning produces more unified lessons. It gives teachers the opportunity to think deliberately about their choice of lesson objectives, the types of activities that will meet these objectives, the sequence of those activities, the materials needed, how long each activity might take, and how students should be grouped.

**4. Establish link between one activity and the next:** Teachers can reflect on the links between one activity and the next, the relationship between the current lesson and any past or future lessons, and the correlation between learning activities and assessment practices. Because the teacher has considered these

connections and can now make the connections explicit to learners, the lesson will be more meaningful to them.

**5. Allows teacher to evaluate their knowledge:** The lesson planning process allows teachers to evaluate their own knowledge with regards to the content to be taught. If a teacher has to teach, for example, a complex grammatical structure and is not sure of the rules, the teacher would become aware of this during lesson planning and can take steps to acquire the necessary information. Similarly, if a teacher is not sure how to pronounce a new vocabulary word, this can be remedied during the lesson planning process.

**6. Makes teachers familiar with different disciplines:** The opportunity that lesson planning presents to evaluate one's own knowledge is particularly advantageous for teachers of English for specific purposes, because these teachers have to be not only language experts, but also familiar with different disciplines like business, engineering, or law—fields that use language in specialized ways.

**7. Builds confidence among teachers:** A teacher with a plan is a more confident teacher. The teacher is clear on what needs to

be done, how, and when. The lesson will tend to flow more smoothly because all the information has been gathered and the details have been decided upon beforehand. The teacher will not waste class time flipping through the textbook, thinking of what to do next, or running to make photocopies. The teacher's confidence will inspire more respect from the learners, thereby reducing discipline problems and helping the learners to feel more relaxed and open to learning.

**8. Helps substitute teacher also:** Lesson plans can be useful for other people as well. Substitute teachers face the challenge of teaching another teacher's class and appreciate receiving a detailed lesson plan to follow. Knowing that the substitute is following the plan also gives the regular classroom teacher confidence that the class time is being used productively in his or her absence.

**9. Evidence of teacher's performance:** Lesson plans can also document for administrators the instruction that is occurring. If a supervisor wants to know what was done in class two weeks ago, the teacher only has to refer to that day's lesson plan.

Finally, lesson plans can serve as evidence of a teacher's professional performance.

**10. Build organizational skills and teaching style.** Teachers are sometimes asked to include lesson plans, along with other materials, as part of a portfolio to support their annual performance evaluation. Teachers applying for new jobs might be asked to submit lesson plans as part of their job application so that employers can get a sense of their organizational skills and teaching style.

### **Types of Unit Plan:**

Unit planning begins with identifying the particular content to be taught and your goals for learning outcomes. *Goals* are about your purpose or aim. They relate to your *rationale* for teaching the particular content that your students will study.

### **Single-Topic Units**

Probably the most typical way teachers plan their classroom curriculum is in terms of instruction in units organized around a



single topic. This kind of organization generally reflects a daily schedule in which reading, math; science, social studies, and so forth are taught separately and divided from each other by assigned time periods.

### **Thematic Units**

Thematic units use a single topic to address several subject areas. Instruction through **thematic units** assumes students learn best when the curriculum is a coherent whole and when they can connect their studies to the real world. The challenge for the teacher is to integrate content from many subjects, all the while being specific enough to be practical yet broad enough to encourage creativity.

Instruction in a unit organized around a theme integrates, for example, reading, math, and science through the study of a broad area, like, for example, "energy" or "exploration." The rationale for the thematic approach is that it demonstrates the interdisciplinary nature of learning itself. First among the reasons for using a thematic approach is that student interest and engagement are likely to increase. Thematic planning lets you use collaborative and cooperative learning, as well as classroom

computers. Further, you end up with a more compact curriculum —with less content overlap and simpler organization of the content. This approach also expands both your assignment and your assessment options.

Often, thematic units are team taught, and several teachers work together to plan and teach the unit. Either way, you begin by selecting an appropriate theme reflecting the curriculum, student interests, experiences, issues, or problems. Identify the goals you wish students to accomplish by the end of the unit. These can be related to state and local standards and competencies. Select and organize content-rich and challenging activities to use. Activities will be broad based, integrating many subject areas.

When your unit is completed, it should be stored for later access. Probably it will first reside on your computer hard drive. We suggest you back up your hard drive regularly and also store a hard copy of it in a file folder in a filing cabinet, where it will be easy to find the next go round. Alternatively, a loose-leaf binder will do if that works for you. Either way, a hard copy will probably be helpful as a place to make notes for changes as you go, and it can later be used for making revisions on the

electronic version. The hard copy in the file cabinet can be altered as your class and the content change and as different teaching resources become available.

### **Single Topic Units**

*Most typical. This kind of organization generally reflects a daily schedule in which reading, math; science, social studies, and so forth are taught separately and divided from each other by assigned time periods.*

### **Thematic Units**

*Assumes students learn best when the curriculum is a coherent whole and when they can connect their studies to the real world. The rationale is that it demonstrates the interdisciplinary nature of learning itself.*

### **Type of Lesson plan:**

Some Important features of a good lesson plan are as under:

- (i) Objectives.** All the cognitive objectives that are intended to be fulfilled should be listed in the lesson plan.
- (ii) Content.** The subject matter that is intended to be covered should be limited to prescribed time. The matter must be

interesting and it should be related to pupil's previous knowledge. It should also be related to daily life situations.

**(iii) Method(s).** The most appropriate method is chosen by the teacher. The method chosen should be suitable to the subject matter to be taught. Suitable teaching aids must also be identified by the teacher. Teacher may also use supplementary aids to make his lesson more effective.

**(iv) Evaluation.** Teacher must evaluate his lesson to find the extent to which he has achieved the aim of his lesson. Evaluation can be done even by recapitulation of subject matter through suitable questions.

Class:X-

Date:

Subject:

Biology

Duration of period: 40minutes

Topic: Structure of human heart

### **Instructional Material (Teaching Aids)**

1. Black board, duster, coloured chalks.
2. A model of human heart

3. A few actual specimens of heart some of which are dissected and at least two are in original state, dissection material such as dish, slide, pin, 'spirit, scissors, forceps, needle, cotton etc.

### **General Objectives**

1. To develop scientific attitude amongst the pupil.
2. To develop power of observation and sense of enquiry amongst the pupil.
3. To develop reflective thinking in pupils.

### **Specific Objectives**

To make students understand the structure and functioning of human heart. **Previous Knowledge**

It is presumed that the students know about the various internal organs of human body.

### **Introduction**

For introducing the lesson teacher will prick the pin' in the finger of one of the students (while doing so the teacher will not say anything and he would also see that the pin he uses for

pricking should be first dipped in spirit). When the pin is pricked some blood on a slide and then he will put the following questions:

1. Can you tell me from where has this blood come?
2. Can you tell me the position of heart in human body?
3. Can you tell me something about the structure of human heart?

### **Announcement of Aim**

When no satisfactory answer is given by students to question 3 above, the teacher will announce the topic by saying that, "Today we will learn about the structure and working of human heart"

### **Presentation**

To present the lesson teacher will use the actual specimen and model of human heart. He will also instruct the students to note him what they are told and. what they observe. '

## **UNIT-II**

### **RESOURCE MATERIAL**

**Importance characteristics and qualities of text-books are listed below:**

(1) Text-books that are intended to be used should be useful for the students as well as teachers.

They should be so designed that on the one hand they may be written according to the psychological requirements of the students and on the other they should serve the purpose of the teacher who wish to impart knowledge to the students in a successful and interesting manner.

2) The size of the book should be handy. It should be possible for the students to carry them properly. They should not be bulky. This is especially true about books intended for the primary classes.

(3) Printing and get-up of the books should be interesting and attractive. They should be printed in the letters that they do not require strain on the eyes of the students. On the other hand they should be correctly and neatly printed.

(4) The exterior of the picture should be attractive. If the exterior is attractive, students would like to carry them and keep them. This is true of the books intended for primary classes.

(5) They should serve the purpose of the subject- matter as well as the aims and objects of teaching. They should be written with a view on the aims and objects of the teaching.

6 The text-books should be accurately written. They should present the subject-matter in such a manner that there is no fault in them. The subject-matter, presented therein should be up to date.

(7) The style of the books should also serve the psychological requirements of the students of different stages. Text books intended for the students of the primary classes should be written in a story form. In the text-books meant for higher



classes the author may use the regional method or some other method that is useful for the students of the stage.

(8) The text-books should continue to keep the interests of the students alive in the subject-matter. The subject-matter should be presented in a simple and lucid style and clear form.

(9) The text-books should contain all the necessary and relative material required for a particular stage of education.

10) The text-books of different stages should be complimentary to each other. Text-books that are used in primary classes should have some bearing and connection with the text-books that shall be used by the students in the Junior High School classes. Similarly text-books that are to be in mind the books that have been used by the students in the Junior High School classes.

(11) Text-books should be free from prejudice. The presentation of the subject-matter should be unbiased. There should be no material which can injure the susceptibility of any class or category of people. They should contain objective description of the people and conditions of different countries.

(12) The text-books should contain charts, maps, diagrams etc. as and where required. Without the charts, maps and diagrams etc. the subject-matter of Geography cannot be taught properly. It is, therefore, necessary to give place to all these things in the text-books.

(13) Geography is a developing subject. Every day we find that new researches have been made in the field of Geography. Up to date knowledge of Geography must be given place in the text-books.

(14) At the end of every chapter of the text-book there should be certain questions that may be used for the revision of the subject-matter. Without these questions the text-books shall not be useful.

(15) If required the text-books may give a substance of the chapter at the end of each lesson. Such a provision will help the students to grasp the subject-matter properly

**MEANING AND IMPORTANCE OF CLASS  
MANAGEMENT**

**Definition:** Classroom management is the term educators use to describe methods of preventing misbehavior and dealing with it if it arises. In other words, it is the techniques teachers use to maintain control in the classroom.

Classroom management is one of the most feared parts of teaching for new teachers. For the students, lack of effective classroom management can mean that learning is reduced in the classroom.

For the teacher, it can cause unhappiness and stress and eventually lead to individuals leaving the teaching profession.

Good classroom management goes hand-in-hand with student discipline. Educators from the novice to the experienced need to consistently practice good classroom management to reduce student behavioral problems.

To achieve good classroom management, educators must understand how social and emotional learning (SEL) influences the quality of teacher-student relationships and how that relationship influences classroom management design. The Collaborative for Academic, Social, and Emotional Learning

describes SEL as "the process through which children and adults acquire and effectively apply the knowledge, attitudes, and skills necessary to understand and manage emotions, set and achieve positive goals, feel and show empathy for others, establish and maintain positive relationships, and make responsible decisions."

Classrooms with management that meets academic and SEL goals require less disciplinary action. However, even the best classroom manager can use a few tips at times to compare his or her process with evidence-based examples of success.

These seven classroom management tactics [reduce misbehavior](#) so teachers can focus their energy on making effective use of their instructional time.

### **Plan for blocks of time**

Discipline problems generally occur when students become disengaged. To keep them focused, teachers need to plan different blocks of time in the classroom.

- **Allocated time** accounts for the total span of teacher instruction and student learning.
- **Instructional time** covers the time teachers spend actively teaching.
- During **engaged time**, students work on tasks on their own.
- And in **academic learning time**, teachers prove that students learned the content or mastered a particular skill.

Each block of time in the classroom, no matter how short, should be planned. Predictable routines help structure blocks of time in the classroom. Predictable teacher routines include opening activities, which ease transitions into class; routine checks for understanding and routine closing activities. Predictable student routines work with partner practice, group work, and independent work.

### **Plan Engaging Instruction:**

According to a 2007 report sponsored by the National Comprehensive Center for Teacher Quality, highly effective instruction reduces but does not fully eliminate classroom behavior problems.

In the report, *Effective Classroom Management: Teacher Preparation and Professional Development*, Regina M. Oliver and Daniel J. Reschly, Ph.D., note that instruction with the ability to encourage academic engagement and on-task behavior usually has:

- Instructional material that students find educationally relevant
- A planned sequential order that is logically related to skill development at students' instructional level
- Frequent opportunities for students to respond to academic tasks
- Guided practice
- Immediate feedback and error correction

The National Education Association offers these recommendations for motivating students, based on the premise that students need to know why the lesson, activity or assignment matters:

- Give students a voice.
- [Give students a choice.](#)
- Make instruction fun or enjoyable.
- Make instruction real or authentic.
- Make instruction relevant.
- Use the technology tools of today.

### **Prepare for physical environment:**

The physical [environment of the classroom](#) contributes to instruction and student behavior.

As part of a good classroom management plan to reduce discipline problems, the physical arrangement of furniture,

resources (including technology) and supplies must achieve the following:

- The physical arrangement eases traffic flow, minimizes distractions and provides teacher(s) with good access to students.
- The classroom setup assists with transitions between various classroom activities and limits distractions.
- The classroom setup supports quality student interactions for particular classroom activities.
- The design of the classroom physical space ensures adequate supervision of all areas.
- The classroom setup contains clearly designated areas for staff and students.

### **Be fair and Consistent**

- Teachers must treat all students respectfully and equitably. When students perceive unfair treatment in the classroom,



whether they are on the receiving end of it or just a bystander, discipline problems can ensue.

- There is a case to be made for differentiated discipline, however. Students come to school with specific needs, socially and academically, and educators should not be so set in their thinking that they approach discipline with a one-size-fits-all [policy](#).
- Additionally, zero-tolerance policies rarely work. Instead, data demonstrates that by focusing on teaching behavior rather than simply punishing misbehavior, educators can maintain order and preserve a student's opportunity to learn.
- It is also important to provide students with specific feedback about their behaviors and social skills, especially after an incident.

**Set and Keep High Expectations:**

Educators should set high expectations for student behavior and for academics. Expect students to behave, and they likely will.

- Remind them of expected behavior, for example, by saying: "During this whole group session, I expect you to raise your hands and be recognized before you start speaking. I also expect you to respect each other's opinions and listen to what each person has to say."
- According to the Education Reform Glossary:
- The concept of high expectations is premised on the philosophical and pedagogical belief that a failure to hold all students to high expectations effectively denies them access to a high-quality education, since the educational achievement of students tends to rise or fall in direct relation to the expectations placed upon them.
- In contrast, lowering expectations -- for behavior or for academics -- for certain groups perpetuates many of the conditions that "can contribute to lower educational,

professional, financial, or cultural achievement and success."

### **Make rules Understandable:**

Classroom rules must align with the school rules. Revisit them regularly, and establish clear consequences for rule-breakers.

In making the classroom rules, consider the following suggestions:

- ▢ Involve students in all aspects of creating the classroom management plan.
- ▢ Keep things simple. Five (5) simply stated rules should be enough; too many rules make students feel overwhelmed.
- ▢ Establish those rules that cover behaviors that specifically interfere with the learning and engagement of your students.
- ▢ Keep the language appropriate to the developmental level of the students.
- ▢ Refer to rules regularly and positively.

- Develop rules for various situations in and out of school (fire drill, field trips, sporting events, etc.).
- Use evidence-based practices to see how rules work -- or not. Monitor the effectiveness of school-wide rules using data.

## **MOTIVATION: CONCEPT, IMPORTANCE AND TYPES**

### **Concept of Motivation:**

The term motivation is derived from the word ‘motive’. The word ‘motive’ as a noun means an objective, as a verb this word means moving into action. Therefore, motives are forces which induce people to act in a way, so as to ensure the fulfillment of a particular human need at a time. Behind every human action there is a motive. Therefore, management must provide motives to people to make them work for the organization.

Motivation may be defined as a planned managerial process, which stimulates people to work to the best of their capabilities,

by providing them with motives, which are based on their unfulfilled needs.

“Motivation means a process of stimulating people to action to accomplish desired goods.” —William G. Scott

“Motivation is the process of attempting to influence others to do your will through the possibility of gain or reward.” —Flippo

Motivation is, in fact, pressing the right button to get the desired human behaviour.

Motivation is no doubt an essential ingredient of any Organisation. It is the psychological technique which really executes the plans and policies through the efforts of others.

**Following are the outstanding Features of the concept of motivation:**

**1. Motivation is a personal and internal feeling:**

Motivation is a psychological phenomenon which generates within an individual.

**2. Motivation is need based:**

If there are no needs of an individual, the process of motivation fails. It is a behavioural concept that directs human behaviour towards certain goals.

### **3. Motivation is a continuous process:**

Because human wants are unlimited, therefore motivation is an ongoing process.

### **4. Motivation may be positive or negative:**

A positive motivation promotes incentives to people while a negative motivation threatens the enforcement of disincentives.

### **5. Motivation is a planned process:**

People differ in their approach, to respond to the process of motivation; as no two individuals could be motivated in an exactly similar manner. Accordingly, motivation is a psychological concept and a complex process.

### **6. Motivation is different from job satisfaction:**

The process of motivation is illustrated in the figure given below:

Figure 15.1 shows an employee has a need or urge for promotion to a higher position. If this need is strong, the

employee will fix his goal and find alternatives to reach the goal. The might have two alternatives, namely, (i) hard work and (ii) enhancement of qualification (e.g., getting MBA) and hard work.



Fig. 15.1 The Process of Motivation

He might choose the second alternative and succeed in getting promotion (goal achievement) thus, his need for promotion would be satisfied and he would start again for the satisfaction of a new need.

### Significance/Importance of Motivation:

Motivation is an integral part of the process of direction.

While directing his subordinate, a manager must create and sustain in them the desire to work for the specified objectives:

#### 1. High Efficiency:

A good motivational system releases the immense untapped reservoirs of physical and mental capabilities. A number of studies have shown that motivation plays a crucial role in determining the level of performance. “Poorly motivated people can nullify the soundest organization.” said Allen.

By satisfying human needs motivation helps in increasing productivity. Better utilization of resources lowers cost of operations. Motivation is always goal directed. Therefore, higher the level of motivation, greater is the degree of goal accomplishment.

## **2. Better Image:**

A firm that provides opportunities for financial and personal advancement has a better image in the employment market. People prefer to work for an enterprise because of opportunity for development, and sympathetic outlook. This helps in attracting qualified personnel and simplifies the staffing function.

## **3. Facilitates Change:**



Effective motivation helps to overcome resistance to change and negative attitude on the part of employees like restriction of output. Satisfied workers take interest in new organizational goals and are more receptive to changes that management wants to introduce in order to improve efficiency of operations.

#### **4. Human Relations:**

Effective motivation creates job satisfaction which results in cordial relations between employer and employees. Industrial disputes, labor absenteeism and turnover are reduced with consequent benefits. Motivation helps to solve the central problem of management, i.e., effective use of human resources. Without motivation the workers may not put their best efforts and may seek satisfaction of their needs outside the organization.

The success of any organization depends upon the optimum utilization of resources. The utilization of physical resources depends upon the ability to work and the willingness to work of the employees. In practice, ability is not the problem but necessary will to work is lacking. Motivation is the main tool for building such a will. It is for this reason that Rensis Likert said,

“Motivation is the core of management.” It is the key to management in action.

## **TYPES OF MOTIVATION:**

There are two types of motivation, Intrinsic and Extrinsic motivation. It's important to understand that we are not all the same; thus effectively motivating your employees requires that you gain an understanding of the different types of motivation.

### **Intrinsic Motivation**

Intrinsic motivation means that the individual's motivational stimuli are coming from within. The individual has the desire to perform a specific task, because its results are in accordance with his belief system or fulfills a desire and therefore importance is attached to it.

Our deep-rooted desires have the highest motivational power.

Below are some examples:

- **Acceptance:** We all need to feel that we, as well as our decisions, are accepted by our co-workers.
- **Curiosity:** We all have the desire to be in the know.
- **Honor:** We all need to respect the rules and to be ethical.
- **Independence:** We all need to feel we are unique.
- **Order:** We all need to be organized.
- **Power:** We all have the desire to be able to have influence.
- **Social contact:** We all need to have some social interactions.
- **Social Status:** We all have the desire to feel important.

### Extrinsic Motivation

Extrinsic motivation means that the individual's motivational stimuli are coming from outside. In other words, our desires to perform a task are controlled by an outside source. Note that even though the stimuli are coming from outside, the result of

performing the task will still be rewarding for the individual performing the task.

Extrinsic motivation is external in nature. The most well-known and the most debated motivation is money. Below are some other examples:

- Employee of the month award
- Benefit package
- Bonuses
- Organized activities

### **Achievement Motivation:**

It is the drive to pursue and attain goals. An individual with achievement motivation wishes to achieve objectives and advance up on the ladder of success.

Here, accomplishment is important for its own sake and not for the rewards that accompany it. It is similar to 'Kaizen' approach

of Japanese Management. This motivation is more important for professionals.

## **2. Affiliation Motivation:**

It is a drive to relate to people on a social basis. Persons with affiliation motivation perform work better when they are complimented for their favorable attitudes and co-operation. This motivation is of greater use where money cannot be used to motivate, especially minimum-wage employees and contingent professionals.

## **3. Competence Motivation:**

It is the drive to be good at something, allowing the individual to perform high quality work. Competence motivated people seek job mastery, take pride in developing and using their problem-solving skills and strive to be creative when confronted with obstacles. They learn from their experience. Specialists, like heart surgeons would feel motivated if they get chances to operate upon unique cases.

## **4. Power Motivation:**

It is the drive to influence people and change situations. Power motivated people create an impact on their organization and are willing to take risk to do so. Ms Mayawati, Chief Minister of UP, is power motivated.

### **5. Attitude Motivation:**

Attitude motivation is how people think and feel. It is their self-confidence, their belief in themselves, and their attitude to life. It is how they feel about the future and how they react to the past.

### **6. Incentive Motivation:**

It is where a person or a team reaps a reward from an activity. It is “you do this and you get that”, attitude. It is the type of rewards and prizes that drive people to work a little harder. Most of the unorganized job workers get motivated when they are offered more money.

### **7. Fear Motivation:**

Fear motivation coerces a person to act against will. It is instantaneous and gets the job done quickly. It is helpful in the short run. Managers following Theory x come into this category. In Indian army, this kind of motivation is very popular.

## UNIT-III

### PROFESSIONAL DEVELOPMENT OF TEACHER

#### Qualifications, Qualities and responsibilities of physical education teacher:

##### Phys Ed Teacher Requirements

Physical education teachers serve as the facilitators of a school's physical education program, and often play a role in the design and implementation of these programs. These professional educators have the goal of providing students with a quality physical education that promotes physical fitness not only in the school setting, but also in students' daily lives. To successfully execute this mission, physical education teachers must meet a specific set of requirements in order to be licensed or certified to teach.

Although requirements to become a physical education teacher will vary from state to state, as it is up to the state's board of education to set all requirements for the certification of teachers, those interested in becoming PE teachers can expect requirements to have a general level of similarity.

## Bachelor's Degree Requirement

All states now require candidates for physical education teaching jobs to possess, at a minimum, a bachelor's degree from a regionally accredited college or university. Bachelor's degrees in physical education may be obtained within an approved teacher preparation program or outside of a state-approved program.

A phys ed teacher bachelor's program prepares students to become competent physical educators in elementary, middle and/or secondary school settings through physical education content and related disciplinary concepts. A bachelor's degree in physical education allows individuals to:

- Demonstrate methods that support the physical, social, cognitive, and emotional development of children
- Create appropriate physical education instruction adaptation for learners of different abilities
- Understand individual group behaviors and motivations as to create a safe learning environment



- Create learning environments that encourage positive social interaction and self-motivation
- Understand effective verbal and nonverbal communication techniques to enhance learning and encourage engagement
- Plan and implement developmentally appropriate instructional strategies based on national and/or state standards

A bachelor's degree program in physical education includes practical components, professional labs, general education requirements, and major course requirements. If the degree is obtained through an approved teacher preparation program, it will include the coursework needed to satisfy a physical education teaching endorsement.

Typical core courses in a physical education bachelor's degree program include:

- Biomechanics
- Physiology of exercise

- History and philosophy of physical education
- Care and Prevention of Athletic Injuries
- Concepts of Motor Skills
- Psychology of Sport
- Adapted Physical Education
- Psychology of Sport
- Motor Development

It is also commonplace for physical education bachelor degree programs to include professional labs that focus on any number of individual, dual, or team sports, such as track and field, gymnastics, wrestling, dancing, and net and wall games. Professional electives in a physical education bachelor's program may allow individuals to focus on health and wellness, coaching, or sports philosophy. Finally, science-based general requirements often include courses in anatomy and physiology, biology, and physics.

Any aspiring Physical Education teacher has to have certain traits to be successful. PE teachers have to be good in the classroom, but they also have to be able to work with parents and other educators. Good PE teachers need to have a range of skills beyond knowing sports, including interpersonal skills, creativity, and more.

### **Athletic Ability**

It seems obvious, but having a [healthy body](#) is important for a PE teacher. Since PE teachers are telling students to make healthy choices, these adults have to model what they say to do. PE teachers don't need to be star athletes, but having a positive attitude toward fitness and instruction is important to show students how living healthy can be enjoyable.

### **Teaching Ability**

This is another trait that seems apparent, but a good Physical Educator needs to be able to *educate*. Being able to distill complex ideas into easily followed steps helps your students feel better about physical activity. Being able to teach also includes being able to recognize which students need more encouragement or a different way of explaining, and assessing learning.

## **Interpersonal Skills**

Working with students, parents, and other teachers requires a range of interpersonal skills. Being a teacher means being a leader and role model to your students. A physical education teacher is a model of values such as leadership, teamwork, and good sportsmanship. Treating the people around you with respect makes them more likely to respect you and your program.

## **Communication**

Being able to communicate effectively is another important skill. Clear communications to your students helps them learn your lessons and keeps them safe. Communicating with parents and other professionals respectfully shows how you treat your students in your program. Effective communication builds a sense [of community](#) where students feel confident in their abilities. With greater confidence and support, students are more likely to [embrace physical activity as a source of fun](#).

## **Patience and Adaptability**

Patience and adaptability are important to a successful teaching career. Since not all students learn in the same way or the same rate, it's important to stay patient and have different approaches.

It's also important to adapt and modify lessons to include students of different levels and abilities. Some schools have no dedicated PE area, so being able to change your lesson plans to adapt to weather or available resources keeps your lesson plans on track.

### **Organization**

As a PE teacher, you might be teaching students who have different ages, physical abilities, and learning styles. In addition, PE teachers often have to work [in different areas](#) or even multiple schools. Being organized keeps all of these needs together and easy to manage. Keeping the classes themselves organized keeps them flowing, limits downtime, and lessens chances for conflict and behavior issues. Any PE class involves students, physical area, and equipment, so keeping all of these things organized makes the entire class run smoothly and maximizes learning opportunities.

### **Creativity**

Being able to adapt and find new activities keeps your classes entertaining and fun for everybody. You can find inspiration for your classes in television, music, and other classes. You can take ideas from all around you to make engaging and fun activities

for students of all physical abilities. Having a variety of activities and outcomes keeps students engaged and interested in your classes.

### **Focus on the Students**

As an educator, you need to make sure your students are learning. Being an educator means you need to have [a passion](#) for helping children learn skills they can use in their daily lives outside of the classroom. Working with children can be taxing, so keeping that passion going helps you make your classes instructional and fun. You also need to keep your students safe and secure during class, since they 'are moving around and in large areas with different equipment.

Becoming a PE teacher is no easy task for any aspiring educator. Being a role model, having professional skills, and creating a fun environment are all crucial traits to have as a great PE teacher. Keeping your time organized and communicating clearly to students, parents, and other educators also makes your job easier and more enriching.

## **Exemplary Character**

A physical education teacher must exhibit exemplary character. Working with children is a demanding task and cannot be done by just any person. His honesty cannot be questioned, and morals must be dominate in a P.E. teacher. The teachers must treat every student equally and fairly. A P.E. teacher's character must be beyond question because of the close proximity the teacher has with the students. He must touch the students to show the correct stretching method and how to properly throw a ball and assist the students with the proper exercise techniques.

## **Communications skills**

Excellent communications skills enable the physical education teacher to explain activities to the students. A P.E. teacher cannot be afraid to speak in front of the students. Directing and instructing physical activity is an essential part of physical education. Communicating the rules of the physical activity chosen that school day or the techniques utilized by the students to perform a physical activity are both important instructional qualities of a P.E. teacher. Possessing communications skills in a

classroom setting is important since many P.E. teachers instruct students in health and wellness classes such as nutrition and biology.

### **Organizational**

Good organizational skills are another quality a P.E. teacher must possess. The physical education teacher must record and report on the progress of each student. Maintaining an accurate record of this progress is important to enable the P.E. teacher to record the grades and evaluate the physical skills of her students. The P.E. teacher has to maintain organization of the athletic programs the students are performing. This organizational quality allows the P.E. teacher to assess the effects of each activity from day-to-day. The teacher must keep track of which students need more attention and which students are more physically capable.

### **Enthusiastic**

A good P.E. teacher is enthusiastic about his job. This quality can be passed onto the students because if the teacher is enthusiastic, the students become enthusiastic about the



activities or athletic training. A P.E. teacher must make the activities fun, competitive and cooperative all at the same time. This breeds teamwork and friendships, while still keeping the students active. This quality also includes motivating students to perform the physical activities and to have fun performing those activities. Recognizing what motivates each student in the P.E. class is a quality that every P.E. teacher needs. Many P.E. teachers coach sports teams, and the ability to motivate players is key to success.

### **Physical Qualities**

A P.E. teacher must be educated knowledgeable in a variety of sports such as tennis, basketball, football, baseball, softball, rock climbing, aerobics, gymnastics and a host of other disciplines. The quality of recognizing what sports require teamwork and what sports are individual is a P.E. teacher's responsibility. P.E. teachers must be physically fit themselves. They must be mindful of the nutritional needs of the students and teach those nutritional needs.

### **Responsibilities of phy edu teacher:**

The NASPE (2003) recommends that children obtain a minimum of 60 minutes of physical activity in a day. It is not possible in most schools to provide the 60 minutes of daily physical activity for every student through the physical education program alone; this has led to development of the idea of having comprehensive school physical activity programs. Some students attend physical education one day a week; others attend two or three days; and a few have daily physical education. The physical educator is to provide maximum physical activity time within the class period, teach skills and activities that transfer into physical activity outside of physical education class, motivate children to be physically active, and take the role of physical activity director for the school. If students are to receive the amount of physical activity they need each day, other opportunities to be physically active within the school day must be provided. The physical education teacher has unique responsibilities in the school physical activity program to ensure that students are physically active within the physical education class. The physical education teacher also has the responsibility to help direct and guide opportunities for physical activity within the school outside the physical education class.

## **Provide Maximum Physical Activity Time Within the Class Period**

Physical education class is just one avenue during a school day that provides the opportunity for physical activity. During the allotted class time it is recommended that children be moderately or vigorously active for at least half of the class period. Several factors can contribute to making this happen:

1. Effectively organize space, equipment, and students.
2. Provide adequate equipment that allows all children to be active at the same time (e.g., one ball per child).
3. Limit teacher talk or instruction time.
4. Plan practice opportunities that are structured for maximum participation (e.g., individual, partner, and small-group activities; nonelimination activities; activities that require no wait time).
5. Structure the class so that learning occurs while students are being physically active.

With maximum and quality activity time, children become more skilled, knowledgeable, and physically fit.

### **Teach Skills and Activities That Transfer Into Physical Activity Outside of Physical Education Class**

Physical education programs have the responsibility to teach skills that students will need to participate in physical activity outside of the physical education class and skills they will need for a lifetime of physical activity. Skills learned in physical education class transfer to skills used in a child's play. From the kindergarten-age child playing tag, to the second grade child jumping rope, to the older child playing a game of kickball, the skilled child is more likely to participate in physical activity. If a child is confident in his or her skills, there is typically no hesitation to play; however, the low-skilled child, especially in the upper grades, is less inclined to take part in group activities for fear of failure and peer ridicule. Students need skills to be participants in physical activity.

Good physical education programs take the time to teach children activities they may do on their own. Examples of these are jump rope chants, nonelimination tag games, hopscotch,

Four Square, tetherball, and basketball activities such as Horse and Around the World. Including these activities briefly in a physical education class and then encouraging children to play them on their own is likely to promote more physical activity on the playground and in their neighborhoods.

### **Motivate Children to Be Active**

Another role of the physical educator is to encourage and motivate children to be active. There are many ways to do this, including promoting community activities, assigning physical activity homework or home fun, showing an interest in the out-of-class physical activity in which children participate, and leading by example.

### **Promoting Community Activities**

There are typically numerous activities in communities that promote physical activity, such as organized recreational sports, dance classes, gymnastics programs, and martial arts. A bulletin board in the gym, the school Web site, and regular announcements are simple ways to promote these opportunities. Brochures, Web sites, or newspaper announcements are available from most physical activity venues.

## **Homework and “Home Fun”**

While homework is often not a pleasant part of a child’s evening, physical activity homework or home fun can be. Home fun may be practicing jump rope tricks with or without a jump rope; participating in simple exercises when commercials come on television; playing outside; walking the dog; talking a walk with a parent or guardian; participating in electronic games that specifically promote physical activity; or practicing manipulative skills such as throwing, kicking, and striking. Physical education homework or home fun can be checked through an honor system by asking for a show of hands with young children and documenting on a physical activity calendar for older children. Sending a physical activity calendar home when children go on holiday or summer vacation is another way to encourage physically active lifestyles. Physical education teachers could ask the classroom teachers to send a physical activity calendar home with the summer reading list.

## **Praise for Participation**

A word of encouragement is a simple way to promote physical activity. Praising young students for play may sound somewhat

strange to most of us; but for a generation that experiences limited physical activity, it may be necessary. Simply inquiring about student involvement in physical activity and praising students for that involvement carry weight with young children. To take this a step further, if a teacher shows up at a youth league sporting event or a dance recital, the child will be elated.

### **Leading by Example**

One final way to motivate children to be active is for the physical education teacher to lead by example. A physically active and fit physical education teacher is a positive influence. The physical education teacher should occasionally share with the students how physical activity fits into his or her life.

By maximizing physical activity time in physical education class, aiding students in transferring skills and activities to out-of-class play, and making efforts to motivate children to be physically active, the physical educator can greatly influence the daily physical activity needs of students.

## **Play a Leadership Role in the Development of the School Physical Activity Program**

The increase in the number of overweight children and the decrease in physical activity time in school make for a national problem. Curtailing this national epidemic can be addressed at a local level, and the physical education teacher must be the “go-to” person to promote change in the schools. The physical education teacher is the physical activity expert in the building and should take on the role of physical activity director for the school. The responsibilities should include the following:

- ▣ Being an active member of the school wellness committee
  - Helping in the evaluation and planning process for the school
  - Actively learning about and promoting opportunities for physical activity in the community
- ▣ Serving as a resource person for classroom teachers



- Informing classroom teachers about the need for and benefits of adding small bouts of physical activity to the school day
- Providing resources and training to the classroom teachers
- Aiding teachers in understanding and implementing appropriate practices for physical activity (see chapter 5)
- Providing opportunities for the teachers to engage in physical activity before or after school
- Organizing school wide physical activity experiences
  - Planning school wide activities such as field day, fun runs, a walking program, and morning exercise breaks
  - Encouraging fund-raisers that promote physical activity (e.g., Jump Rope for Heart, Walk for Diabetes, St. Jude's Walk)
  - Planning before- and after-school clubs for activities such as jump rope, walking, dance, gymnastics, and intramural

## **Meaning and importance of athletic meet:**

The value of athletics in schools is significant and cannot be overlooked. It has a profound impact on individuals, the school as a whole, as well as the [community](#).

Athletics is powerful and transcendent. It can bridge gaps, bring people with relatively nothing in common together, and gives many participates unbelievable, life-altering opportunities. Here, we examine several of the key benefits of having an established, successful athletics program in your school.

### **Opportunities**

Virtually every little boy dreams of playing professional baseball, [football](#), or basketball. Very few realize that dream, but it does not mean that athletics cannot provide them with other meaningful opportunities. The top tier athletes often receive a scholarship to attend college and continue their athletic career. For many, this may be their only opportunity to go to college. This opportunity, if taken advantage of, can be life-altering.

For the majority, high school is the last time they will participate in organized athletics as a player. However, there are still other opportunities that may result because of their participation in and passion for school athletics. Coaching is a terrific way to stay involved with athletics. Many successful coaches were average high school players with both a passion and understanding of how the game was played but without the individual talent necessary to succeed at the next level.

Athletics can also provide opportunities through relationships. In a team sport, players are typically close to one another. These relationships can span the length of a lifetime. Staying connected may provide you with a job or investment opportunity. It may simply provide you with life-long friends who have your back in any situation.

### **School Pride**

Every school administrator and teacher want the student body to have [pride in their school](#). Athletics is the building block of promoting school pride. Pre-game events such as homecoming, pep rallies, and parades are intended to show off that school

pride. We love to support our team no matter whether we win or whether we lose. We hate our rivals and despise them, even more, when they beat us.

School pride is about coming together for every game—putting individual differences aside and yelling and cheering loudly together in support of your team. It is about painting our faces and wearing school colors. It is about the student section coming up with creative chants that get in the other team's heads before the game even begins. School pride is about staying after the game and singing the alma mater, no matter whether you win or whether you lose.

School pride creates a bond between an individual and the school. This bond spans the course of a lifetime. It can be measured by the sense of pride that you feel when your high school wins a state championship twenty years after you graduate. It is the joy that you feel when you have a child attending and playing for your alma mater.

It is a connection that can be both deep and meaningful.

## **School Recognition**

Teachers and schools rarely receive positive media attention. When you see a story on those subjects, it is typically negative in nature. However, the coverage of athletics is the exact opposite. Sport sells! Having a successful athlete and/or team will likely give you positive media coverage within and around your community. While a teacher with a successful academic program will garner little to no attention, a team with a 10–0 record will be followed closely by the media and the community.

This type of notoriety is celebrated. It makes the school attractive to families looking to move into a community that values an outstanding athletics program. It also puts fans in the stands, which translates to more money being poured into the athletics department.

This allows coaches and athletic directors the freedom to purchase equipment and training tools that may continue to give their athletes a competitive advantage.

Most schools do not want to have an athletic team. Instead, they want to have an athletic program. A program is continuously successful year after year. They build and nurture talent at an early age. Programs garner the most athletic success and, thus, attention. A good player at a well-known program will have a better chance of [receiving a scholarship](#) than a good player on a lesser known team.

## **Student Motivation**

[Motivation comes in many forms.](#) Athletics can serve as a powerful academic motivator for athletes who would otherwise underperform in the classroom. There are many students who see school as secondary to athletics. As adults, we realize that academics are of far greater importance than athletics. However, as teenagers, the academic side was probably not the center of our focus as it should have been.

The good news is that schools require their student athletes to maintain a certain grade average (typically 60% or above) to participate in athletics. Many students stay in school and keep their grades up only because of their desire to compete in

athletics. This is a sad reality but may also provide the greatest reason for keeping athletics in schools.

Athletics also serves as motivation for staying out of trouble. Athletes know that if they get in trouble, there is a reasonable chance that they will be suspended for games or parts of a game.

This does not mean that every athlete makes the best decision every time. However, the prospect of playing athletics has been a powerful deterrent from making wrong choices for many student athletes.

### **Essential Life Skills**

Athletics provides athletes with several benefits including the acquisition of valuable life skills that will benefit them throughout their life. These skills are more beneficial than the games themselves, and their impact can be powerful and transcending. Some of these skills include:

- **Effort** - This is defined as giving it everything you have in both practice and games. Effort can overcome the lack of talent in many cases. A player who gives 100% effort is

said to have heart. Life lesson: Give your best no matter what and you cannot question yourself in the end.

- **Hard work** - It is the preparation you put into becoming a better player before the game is played. This includes strength and endurance training, individual practice time, and film study. Life lesson: Preparation is the key to success. If you work hard to prepare, mistakes are less likely to occur.
- **Self-discipline** - It is the ability to maintain and carry out the role the coaches have determined within the game plan. This includes understanding your own individual strengths and weaknesses. Life lesson: Stay on task to get the job done no matter what distractions there may be.
- **Teamwork** - This is the ability to work with others to complete a goal successfully. A team will only be successful if each individual fulfills their role. Life lesson: Working with others is an essential part of being successful. Doing your own thing can be detrimental and lead to many problems.



- **Time management** - This is the ability to fulfill all obligations including practice, homework, family, friends, etc. Life lesson: You must be well-balanced and adept at handling all aspects of your life so that you are not overwhelmed and stressed out.

### **Role of physical education teacher in promoting national integration and international understanding:**

Physical Education is integral to education process. It results in holistic development of personality physically fit, mentally sharp, emotionally balanced and socially well adjusted. J.P. Thomas defines: “physical Education as form of Physical activity for the development of total personality of the child and its fulfillment and perfection in body, mind and Spirit”. Physical education and sports is a media through which integration process shall take place. The term integration consists of co-operation. Co-operation is an integrated action of individuals or groups towards the achievement of some common purpose or goal. Sports competitions, group competitions, inter-community sports contests, intramural sports competitions, special programmes in the schools and at home play a predominant role

in developing the concept of national integration. The spirit of brotherhood and friendship is fostered through games and sports. Ideas, actions, reactions, behaviours and human movements acquire a unity of colour and flavor at the sports field. The ideal of oneness springs up through play. Physical education and sports create the principle of give and take policy among the individuals. Education cannot be a happy affair unless the teachers and the students co-operate or integrate with one another. Similarly no game can be owned without the co-operation or integration of all the members of the team. It can be fairly said that physical education and national integration go hand in hand. Further, physical education and sports develop the basic components of integration such as co-operation, attitude, sympathy, friendliness, fellow feeling, willingness, respect to others, co-ordination, motivation, tolerance, trust-worthiness, integrity, oneness, and identification. Etymologically, the term integration means, “unify and made into one whole”. Physical education in the context of national integration absorbs elements such as cooperation, discipline, judicious use of leisure, competitive spirit, democratic values, socialization, culture,

national spirit, ideal citizenship, cordial relationships, removal of social evils, employment and Co-operation

Etymologically, the term co-operation means “working jointly or in unity”. In other words, co-operation generally means, “working together for the pursuit of a common goal”. “Co-operation and competition are both natural human activities. Knowingly and unknowingly, competition has always been going on. Competition, on the other hand, is an integrated action of individual or groups towards the achievement of some common purpose or goal. Every organization (a club, a team, an association) has some goals to achieve. Until and unless, all the individuals comprising such an organization work in unison, those goals cannot be achieved. Similarly no match can be won without the co-operation of all the members of the team. In physical education, co-operation and competition co-exist. Team play is impossible without cooperation. Besides, the co-operation between the team and the coach is an important factor. Infact, the total concept of physical education and sports competition is based on the spirit of cooperation.

## **Discipline**

The role of physical education in shaping up of national integration is pivotal. Discipline is the most important component of national integration. To construct national integration among the community and society, discipline of the citizens is important. Discipline means, order, or good training or restraint. Physical education and sports make the man disciplined. Virtues like decent behavior, initiative, sincerity, conduct and character, interest, patience, loyalty, integrity, neatness and efficiency are inculcated through sports and games. To achieve national integration discipline of the citizens is essential.

### **Judicious use of leisure**

Another important aspect of national integration is the judicious use of leisure. Physical education and sports mould the individual to make use of the leisure time. The worthwhile leisure time activity enables individuals to make the best use of his extra time and energy and also to regain energy which is lost in daily routine. This creative activity will have an educational value. It brings them closer to the realization of the objectives of physical education. Recreation clubs in schools, colleges,

universities cater to the need of the students. It keeps the individual away from unwanted and undesirable areas. Thus judicious use of leisure time activity develops national integration.

### **Competitive spirit**

The spirit of competition will bring a real national integration. A sport without competitive spirit is like a mansion without inhabitants. Sports competitions are organized in such a way that each young boy or girl gets an opportunity to show his or her spirit of competition. This idea develops national integration. This is another facet of physical education in national integration.

### **Democratic values**

Physical education must inculcate true democratic values in the participants. Democracy is developed among the team and players by allowing equal chances to all and by respecting others rights and by fulfilling one's own responsibilities.

### **Socialization**

Socialization is another important aspect of national integration. Socialization means „social training“. Every society prescribes its own ways and means of giving social training to its new born members so that they may develop their own personality. Socialization is often referred to as the “transmission of culture” Socialization is social learning. Sports develops socialization and socialization develops sports. Physical education and sports change amoral, asocial, and uncultured behavior into moral, social, and cultured behaviours. Strictly speaking, physical education and sports socialize and humanize the individual. A society which is strong in socialization can develop national integration.

## **Culture**

Culture is often called “learned ways of behavior”. One of the aims of culture is to grow interconnectedly and consistently. Physical education is “integration”. Integration plays a predominant role in physical education and sports. This social quality is cultured through sports. As long as sports exist, the idea of integration envelops. In fact, sport is a cultural activity. People meet together in sports field from various cultural

backgrounds and habits. In the process differences will be washed away and new born qualities will have a chance to take birth. After having achieved this quality, the ideal of oneness can be realized. “This cultural quality has been acquired only through playing games and sports. Man is not only a social animal but also a cultural being. Man’s social life has been made possible because of culture. In this way, the cultural aspect of national integration and sports are thickly related to each other. The role of physical education in national integration is unlimited. Physical education inculcates culture. Sports is a cultural activity. Culture influences and makes the citizens develop national integration. Culture is a unique possession of man. Culture does not exist at sub-human level. Man is born and brought-up in a cultural environment. Thus it can be said that physical education under the umbrella of culture can develop national integration.

### **National Spirit**

One of the most important roles of physical education in national integration is its cultivation of nationalism. Nationalism means patriotism. To develop national integration, nationalism is

the important component. A good programme of physical education provides an opportunity to the individuals or players to think and feel a sense of belonging to the country or nation or to the community as a whole, The patriotism or love of one's own country is also developed through sport.

### **Ideal Citizenship**

The goal of physical education is to prepare worthy citizens. Worthy citizens are shaped by customs, beliefs, public opinion, social suggestions, family, values, religious tenets social ideals, legal standards, ceremonies, education, leadership, codes art, intellectual unity, administration, physical education and sports etc. Physical education and sports take more pains and strains to cultivate national integration. By administering ideal type of physical education worthy citizenship can be cultured.

### **Cordial relationship**

One of the most important components of national integration is the cordial relationship between individuals and groups. Physical education stands for establishment of a truly democratic society. The individual must learn to bear



responsibilities. Group competitive and cooperative living lead the participant to a life of mutual give and take and a life of co-existence. Physical education should endeavor to inculcate such qualities as co-operation, friendship, sympathy, honesty, fair play, sportsmanship and respect for authority. Modern. physical education aims to develop the cordial relationship between the countries and continents too. „Cordial relationships in sports and physical education is passed on from one generation to other by way of imitation and initiative. Cordial relationship is one of the values of democracy which is formed among the individual through team play. Cordial relationship is impossible without team play and co-operation.

### **Removal of Social Evils**

Play is a media through which all social evils can be washed away. Untouchability and group discrimination stem from prejudices and narrow mind set. The evils like castesim, communalism, coloursim, can be eliminated through sports and physical education and pave way for national integration.

Physical education and sports is the only means through which these types of social evils or crimes can be nullified.

### **Employment**

A number of openings are created by physical education and sports as far as employment opportunity is concerned. All top level or top class athletes and players are holding jobs in various private and public sectors. Almost everywhere in the world, there are institutions of physical education and sports sciences and coaching centers where professional workers offer their services for specialized jobs. It can be concluded that physical education is a job-oriented activity.

### **Peace**

Peace means freedom from war, „anxiety and disorder. In other words, peace means „satisfaction“ or „quiet“ or „calm“. Man deserves peace. Sometimes man tries to seek peace and pleasure, but could not achieve it. Physical education and sports is the only source through which peace can be cultivated among the population. The plethora of national and international sports competitions and tournaments are aims at that objective. It can

be said comprehensively that peace is the most important aspect of national integration that is achieved through sports and Physical education. Conclusion Physical education and national integration are two sides of the same coin. Education which can bring about a unity of a approach and harmony of peach can establish national integration. In these days of turmoil physical education has a pivotal role to play in assembling national integration.

#### UNIT-IV

As we all know FOOD is the basic requirement of every individual to fulfil the energy needs and to meet the development of the body. The food which we eat is know as “DIET”. The energetic food in our diet consists of various types of essential chemicals for our body known as “NUTRITION”.

Diet is the daily intake of food by human body. It provides energy for workout along with growth and development of body. Human beings take different types of food in their diet; it may be liquid food or solid (hard) food. These things which we eat give energy to our body for performing work in a proper way. Our body grows, develops and functions properly with the help of macro and micronutrients in the food. The food contains various types of nutrients in it.

**MACRONUTRIENTS:** These are required in a large proportion in our diet like carbohydrates, fats and proteins.

**MICRONUTRIENTS:** These are required in small proportion in our diet like vitamins and minerals. They are considered as supplement food.

**Balanced diet:Divided into three parts:**

**ENERGY YIELDING FOOD:** It consists of carbohydrates and fats food (micronutrients) items.

**BODYBUILDING FOOD:** It consists of proteins. It helps in growth and development of body.

**DEFENSIVE FOOD:** It consists of vitamins, minerals and water(micronutrients).

### **BALANCED DIET: Functions**

1. Sufficient energy
2. Optimum growth and development
3. Proper functioning of organs.
4. Faster recovery.
5. Efficient immune system.
6. Improves health status.
7. Improves metabolism.
8. Prevents deficiency diseases

To eat a healthy diet, you may need to make some changes. Remember that you can change your eating habits a little bit at a time. Small changes are easier to make and can lead to better health.

### **Here are some ways to make healthy changes in your eating habits:**

- ▢ Keep more fruits, low-fat dairy products (low-fat milk and low-fat yogurt), vegetables, and whole-grain foods at home and at work. Focus on adding healthy food to your diet, rather than just taking unhealthy foods away.
- ▢ Try to eat a family meal every day at the kitchen or dining table. This will help you focus on eating healthy meals.

- ▢ Buy a healthy-recipe book, and cook for yourself. Chew gum when you cook so you won't be tempted to snack on the ingredients.
- ▢ Pack a healthy lunch and snacks for work. This lets you have more control over what you eat.
- ▢ Put your snacks on a plate instead of eating from the package. This helps you control how much you eat.
- ▢ Don't skip or delay meals, and be sure to schedule your snacks. If you ignore your feelings of hunger, you may end up eating too much or choosing an unhealthy snack. If you often feel too hungry, it can cause you to focus a lot on food.
- ▢ Eat your meals with others when you can. Relax and enjoy your meals, and don't eat too fast. Try to make healthy eating a pleasure, not a chore.
- ▢ Drink water instead of high-sugar drinks (including high-sugar juice drinks).

## **COMPONENTS OF BALANCED DIET**

### **CARBOHYDRATES**

- ▢ Carbohydrates provide fuel to all cells, organs and tissues in the form of glucose. Some of its sources include foods such as whole grains, fruits, vegetables and legumes. You may also get good amount of carbohydrates in foods like candies, pastries, cookies and flavoured beverages. Carbohydrate is one of the important components of a balanced diet. On an average, an adult should get about 45 percent to 65 percent of their calories from carbohydrates.

## **VITAMINS**

Vitamins help with chemical reactions in the body and that is why the body needs 13 different vitamins to grow and develop. Each vitamin helps with certain functions. For example, vitamin A improves vision, vitamin C maintains healthy skin and vitamin D keeps the bones and teeth strong. You can get vitamins from fresh fruits and vegetables or from vitamin supplements.

## **FIBER**

Fiber, often referred to as roughage, is a type of carbohydrate found in plant foods that the body is not able to digest or absorb. Eating a balanced diet that is high in fiber can keep your body systems regular and contribute to a lowered risk of chronic disease.

## **FAT**

Fat is an important part of a balanced diet. It contributes to around 25 percent to 35 percent of the daily caloric intake, however, the content of saturated fats should be kept to no more than 10 percent of the total fat intake. The healthiest fats come from mono saturated and polyunsaturated sources such as nuts, olive oil and fish. One can skip trans-fatty acids entirely.

## **MINERALS**

Minerals are very important for the body and they need to be delivered through food since the body can't make them. Many minerals, such as calcium, potassium and iron are vital to the proper functioning of the body and must be taken in relatively large amounts. Other trace minerals like zinc, selenium and

copper are only needed in small amounts to maintain good health.

## **WATER**

Water is essential to our survival and should be taken in adequate amounts. It keeps the body hydrated and let the body function properly. Water accounts for 55%-65% of body weight, but because the body can't store water, we must constantly replenish it.

## **PROTEIN**

Proteins are nutrients that are essential to the building, maintenance and repair of body tissues such as the skin, the internal organs and muscles. Out of 22 protein types, the body can make 14, the other 8, called essential amino acids, can only be obtained from food. A balanced diet has to be rich in these 8 proteins. Fish, meat, poultry, eggs, cheese and other foods from animal sources provide all the eight essential amino acids.

A balanced diet is about adding all of the essential factors necessary for growth, so that every part of the body gets what it needs to function properly. A balanced diet is also indicative of a proportioned diet. This means that you're not only eating the *right* food items, you're also eating them in the proper amounts. Adopting a balanced diet not only boosts your health, but also helps with weight loss.

## **MALNUTRITION**

**Malnutrition** results from a poor diet or a lack of food. It happens when the intake of nutrients or energy is too high, too low, or poorly balanced.

Undernutrition can lead to delayed growth or wasting, while a diet that provides too much food, but not necessarily balanced, leads to obesity.

In many parts of the world, undernutrition results from a lack of food. In some cases, however, undernourishment may stem from a health condition, such as an eating disorder or a chronic illness that prevents the person from absorbing nutrients.

According to the World Health Organization (WHO), malnutrition is the gravest single threat to global public health. Globally, it contributes to 45 percent of deaths of children aged under 5 years.

Malnutrition involves a dietary deficiency. People may eat too much of the wrong type of food and have malnutrition, but this article will focus on undernutrition, when a person lacks nutrients because they do not consume enough food.

Poor diet may lead to a lack of vitamins, minerals, and other essential substances. Too little protein can lead to kwashiorkor, symptoms of which include a distended abdomen. A lack of vitamin C can result in scurvy.

Scurvy is rare in industrialized nations, but it can affect older people, those who consume excessive quantities of alcohol, and people who do not eat fresh fruits and



vegetables. Some infants and children who follow a limited diet for any reason may be prone to scurvy.

According to the World Health Organization (WHO), 462 million people worldwide are malnourished, and stunted development due to poor diet affects 159 million children globally.

Malnutrition during childhood can lead not only to long-term health problems but also to educational challenges and limited work opportunities in the future. Malnourished children often have smaller babies when they grow up.

It can also slow recovery from wounds and illnesses, and it can complicate diseases such as measles, pneumonia, malaria, and diarrhea. It can leave the body more susceptible to disease.

## **Symptoms**

Signs and symptoms of undernutrition include:

- lack of appetite or interest in food or drink
- tiredness and irritability
- inability to concentrate
- always feeling cold
- loss of fat, muscle mass, and body tissue
- higher risk of getting sick and taking longer to heal
- longer healing time for wounds
- higher risk of complications after surgery
- depression

□ reduced sex drive and problems with fertility

In more severe cases:

breathing becomes difficult

skin may become thin, dry, inelastic, pale, and cold

the cheeks appear hollow and the eyes sunken, as fat disappears from the face

hair becomes dry and sparse, falling out easily

Eventually, there may be respiratory failure and heart failure, and the person may become unresponsive. Total starvation can be fatal within 8 to 12 weeks

Children may show a lack of growth, and they may be tired and irritable. Behavioral and intellectual development may be slow, possibly resulting in learning difficulties.

Even with treatment, there can be long-term effects on mental function, and digestive problems may persist. In some cases, these may be lifelong.

Adults with severe undernourishment that started during adulthood usually make a full recovery with treatment.

### **Communicable Disease**

## **What is a communicable disease?**

A communicable disease is one that is spread from one person to another through a variety of ways that include: contact with blood and bodily fluids; breathing in an airborne virus; or by being bitten by an insect.

Reporting of cases of communicable disease is important in the planning and evaluation of disease prevention and control programs, in the assurance of appropriate medical therapy, and in the detection of common-source outbreaks. California law mandates healthcare providers and laboratories to report over 80 diseases or conditions to their local health department. Some examples of the reportable communicable diseases include Hepatitis A, B & C, influenza, measles, and salmonella and other food borne illnesses.

## **How do these communicable diseases spread?**

How these diseases spread depends on the specific disease or infectious agent. Some ways in which communicable diseases spread are by:

- ▢ physical contact with an infected person, such as through touch (staphylococcus), sexual intercourse (gonorrhea, HIV), fecal/oral transmission (hepatitis A), or droplets (influenza, TB)
- ▢ contact with a contaminated surface or object (Norwalk virus), food (salmonella, E. coli), blood (HIV, hepatitis B), or water (cholera);
- ▢ bites from insects or animals capable of transmitting the disease (mosquito: malaria and yellow fever; flea: plague); and
- ▢ travel through the air, such as tuberculosis or measles.

Here are some key points about chickenpox. More detail is in the main article.

- Chickenpox is caused by the varicella zoster virus.
- Varicella has an incubation period of 10-21 days.
- Chickenpox is highly contagious.
- The infection spreads in a similar way to colds and flu.
- A diagnosis can normally be reached by observing the signs and symptoms.
- Symptoms
- chicken pox
- The hallmark symptom of chickenpox is a rash.
- Before the rash appears, there will be:
  - 
  - a general feeling of being unwell (malaise)
  - fever, which is usually worse in adults than children
  - aching muscles
  - loss of appetite
  - in some cases, a feeling of nausea
- After the rash appears, there will be:
  - 
  - Rash: Severity varies from a few spots to a rash that covers the whole body.
  - Spots: The spots develop in clusters and generally appear on the face, limbs, chest, and stomach. They tend to be small, red, and itchy.
  - Blisters: Blisters can develop on the top of the spots. These can become very itchy.
  - Clouding: Within about 48 hours, the blisters cloud over and start drying out. A crust develops.
  - Healing: Within about 10 days, the crusts fall off on their own.
  - During the whole cycle, new waves of spots can appear - in such cases, the patient might have different clusters of spots at varying stages of itchiness, dryness, and crustiness.

- ▢ Other symptoms
- ▢ A few people have more severe symptoms.
- ▢ If the following occur, a doctor should be contacted:
  - ▢ the skin around the spots or blisters becomes painful and red
  - ▢ there are breathing difficulties
  - ▢ Most healthy individuals make a full recovery, as with a cold or flu, by resting and drinking plenty of fluids.

### **Treatment**

Chickenpox generally resolves within a week or two without treatment. There is no cure, but a vaccine can prevent it.

A doctor may prescribe medication or advise on how to reduce symptoms of itchiness and discomfort, and also on how to prevent the infection from spreading to other people.

**Pain or fever:** Tylenol (acetaminophen), which is available to purchase online, may help with symptoms of high temperature and pain. It is important to follow the instructions provided by the manufacturer. Aspirin containing products should NOT be used for chickenpox as this can lead to complications. Acetaminophen (Tylenol) can be used at any time during pregnancy.

**Avoiding dehydration:** It is important to drink plenty of fluids, preferably water, to prevent dehydration. Some doctors recommend sugar-free popsicles or Pedialyte for children who are not drinking enough.

**Mouth soreness:** Sugar-free popsicles help ease symptoms of soreness if there are spots in the mouth. Salty or spicy foods should be avoided. If chewing is painful, soup might be a good option, but it should not be too hot.

**Itchiness:** Itchiness can become severe, but it is important to minimize scratching to reduce the risk of scarring.

The following may help prevent scratching:

- ▢ keeping fingernails clean and as short as possible
- ▢ placing mittens or even socks over a child's hands when they go to sleep, so that any attempt at scratching during the night does not cut the skin
- ▢ applying calamine lotion or having an oatmeal bath to reduce itching
- ▢ wearing loose clothing
- ▢ Antiviral medication may be prescribed during pregnancy, for adults who get an early diagnosis, in newborns, and for those with a weakened immune system. Acyclovir is one example.

This works best if it is given within 24 hours of developing symptoms. Acyclovir reduces the severity of symptoms but does not cure the disease.

Typhoid fever is caused by *Salmonella typhi* bacteria. Typhoid fever is rare in industrialized countries. However, it remains a serious health threat in the developing world, especially for children.

Typhoid fever spreads through contaminated food and water or through close contact with someone who's infected. Signs and symptoms usually include a high fever, headache, abdominal pain, and either constipation or diarrhea.

Most people with typhoid fever feel better within a few days of starting antibiotic treatment, although a small number of them may die of complications. Vaccines against typhoid fever are available, but they're only partially effective. Vaccines usually are reserved for those who may be exposed to the disease or are traveling to areas where typhoid fever is common.

### **Symptoms**

Signs and symptoms are likely to develop gradually — often appearing one to three weeks after exposure to the disease.

### **Early illness**

Once signs and symptoms do appear, you're likely to experience:

- Fever that starts low and increases daily, possibly reaching as high as 104.9 F (40.5 C)
- Headache
- Weakness and fatigue
- Muscle aches
- Sweating
- Dry cough
- Loss of appetite and weight loss
- Abdominal pain
- Diarrhea or constipation
- Rash
- Extremely swollen abdomen
- Later illness

If you don't receive treatment, you may:

Become delirious

Lie motionless and exhausted with your eyes half-closed in what's known as the typhoid state

In addition, life-threatening complications often develop at this time.

In some people, signs and symptoms may return up to two weeks after the fever has subsided.

typhoid fever is caused by virulent bacteria called *Salmonella typhi*. Although they're related, *Salmonella typhi* and the bacteria responsible for salmonellosis, another serious intestinal infection, aren't the same.



### **Fecal-oral transmission route**

The bacteria that cause typhoid fever spread through contaminated food or water and occasionally through direct contact with someone who is infected. In developing nations, where typhoid fever is established (endemic), most cases result from contaminated drinking water and poor sanitation. The majority of people in industrialized countries pick up typhoid bacteria while traveling and spread it to others through the fecal-oral route.

This means that *Salmonella typhi* is passed in the feces and sometimes in the urine of infected people. You can contract the infection if you eat food handled by someone with typhoid fever who hasn't washed carefully after using the toilet. You can also become infected by drinking water contaminated with the bacteria.

### **Typhoid carriers**

Even after treatment with antibiotics, a small number of people who recover from typhoid fever continue to harbor the bacteria in their intestinal tracts or gallbladders, often for years. These people, called chronic carriers, shed the bacteria in their feces and are capable of infecting others, although they no longer have signs or symptoms of the disease themselves.

### **Risk factors**

Typhoid fever remains a serious worldwide threat — especially in the developing world — affecting an estimated 26 million or more people each year. The disease is established (endemic) in India, Southeast Asia, Africa, South America and many other areas.

Worldwide, children are at greatest risk of getting the disease, although they generally have milder symptoms than adults do.

If you live in a country where typhoid fever is rare, you're at increased risk if you:

- Work in or travel to areas where typhoid fever is established (endemic)
- Work as a clinical microbiologist handling *Salmonella typhi* bacteria
- Have close contact with someone who is infected or has recently been infected with typhoid fever
- Drink water contaminated by sewage that contains *Salmonella typhi*

## Complications

### **Intestinal bleeding or holes**

The most serious complications of typhoid fever — intestinal bleeding or holes (perforations) in the intestine — may develop in the third week of illness. A perforated intestine occurs when your small intestine or large bowel develops a hole, causing intestinal contents to leak into your abdominal cavity and triggering signs and symptoms such as severe abdominal pain, nausea, vomiting and bloodstream infection (sepsis). This life-threatening complication requires immediate medical care.

### **Other, less common complications**

Other possible complications include:

- Inflammation of the heart muscle (myocarditis)
- Inflammation of the lining of the heart and valves (endocarditis)
- Pneumonia
- Inflammation of the pancreas (pancreatitis)
- Kidney or bladder infections
- Infection and inflammation of the membranes and fluid surrounding your brain and spinal cord (meningitis)

- Psychiatric problems, such as delirium, hallucinations and paranoid psychosis

With prompt treatment, nearly all people in industrialized nations recover from typhoid fever. Without treatment, some people may not survive complications of the disease.

## **Prevention**

In many developing nations, the public health goals that can help prevent and control typhoid fever — safe drinking water, improved sanitation and adequate medical care — may be difficult to achieve. For that reason, some experts believe that vaccinating high-risk populations is the best way to control typhoid fever.

A vaccine is recommended if you live in or you're traveling to areas where the risk of getting typhoid fever is high.

## **MALARIA**

Malaria is a life-threatening mosquito-borne blood disease. The Anopheles mosquito transmits it to humans

The parasites in mosquitos that spread malaria belong to the Plasmodium genus. Over 100 types of Plasmodium parasite can infect a variety of species. Different types replicate at different rates, changing how quickly the symptoms escalate, and the severity of the disease.

Five types of Plasmodium parasite can infect humans. These occur in different parts of the world. Some cause a more severe type of malaria than others.

Once an infected mosquito bites a human, the parasites multiply in the host's liver before infecting and destroying red blood cells.

In some places, early diagnosis can help treat and control malaria. However, some countries lack the resources to carry out effective screening.

## **Symptoms**

### **Uncomplicated malaria**

The Anopheles mosquito passes on malaria.

Malaria is passed on by the Anopheles mosquito.

A doctor would give this diagnosis when symptoms are present, but no symptoms occur that suggest severe infection or dysfunction of the vital organs.

This form can become severe malaria without treatment, or if the host has poor or no immunity.

Symptoms of uncomplicated malaria typically last 6 to 10 hours and recur every second day.

Some strains of the parasite can have a longer cycle or cause mixed symptoms.

As symptoms resemble those of flu, they may remain undiagnosed or misdiagnosed in areas where malaria is less common.

In uncomplicated malaria, symptoms progress as follows, through cold, hot, and sweating stages:

- a sensation of cold with shivering
- fever, headaches, and vomiting
- seizures sometimes occur in younger people with the disease
- sweats, followed by a return to normal temperature, with tiredness

In areas where malaria is common, many people recognize the symptoms as malaria and treat themselves without visiting a doctor.

### **Severe malaria**

In severe malaria, clinical or laboratory evidence shows signs of vital organ dysfunction.

### **Symptoms of severe malaria include:**

- fever and chills
- impaired consciousness
- prostration, or adopting a prone position

- multiple convulsions
- deep breathing and respiratory distress
- abnormal bleeding and signs of anemia
- clinical jaundice and evidence of vital organ dysfunction
- Severe malaria can be fatal without treatment.

What is hepatitis?

Hepatitis refers to an inflammatory condition of the liver. It's commonly caused by a viral infection, but there are other possible causes of hepatitis. These include autoimmune hepatitis and hepatitis that occurs as a secondary result of medications, drugs, toxins, and alcohol. Autoimmune hepatitis is a disease that occurs when your body makes antibodies against your liver tissue.

Your liver is located in the right upper area of your abdomen. It performs many critical functions that affect metabolism throughout your body, including:

bile production, which is essential to digestion

filtering of toxins from your body

excretion of bilirubin (a product of broken-down red blood cells), cholesterol, hormones, and drugs

breakdown of carbohydrates, fats, and proteins

activation of enzymes, which are specialized proteins essential to body functions

storage of glycogen (a form of sugar), minerals, and vitamins (A, D, E, and K)

synthesis of blood proteins, such as albumin

synthesis of clotting factors

According to the Centers for Disease Control and Prevention (CDC) Trusted Source, approximately 4.4 million Americans are currently living with chronic hepatitis B and C. Many more people don't even know that they have hepatitis.

Treatment options vary depending on which type of hepatitis you have. You can prevent some forms of hepatitis through immunizations and lifestyle precautions.

The 5 types of viral hepatitis

Viral infections of the liver that are classified as hepatitis include hepatitis A, B, C, D, and E. A different virus is responsible for each type of virally transmitted hepatitis.

Hepatitis A is always an acute, short-term disease, while hepatitis B, C, and D are most likely to become ongoing and chronic. Hepatitis E is usually acute but can be particularly dangerous in pregnant women.

Hepatitis A

Hepatitis A is caused by an infection with the hepatitis A virus (HAV). This type of hepatitis is most commonly transmitted by consuming food or water contaminated by feces from a person infected with hepatitis A.

## Hepatitis B

Hepatitis B is transmitted through contact with infectious body fluids, such as blood, vaginal secretions, or semen, containing the hepatitis B virus (HBV). Injection drug use, having sex with an infected partner, or sharing razors with an infected person increase your risk of getting hepatitis B.

It's estimated by the CDC Trusted Source that 1.2 million people in the United States and 350 million people worldwide live with this chronic disease.

## Hepatitis C

Hepatitis C comes from the hepatitis C virus (HCV). Hepatitis C is transmitted through direct contact with infected body fluids, typically through injection drug use and sexual contact. HCV is among the most common bloodborne viral infections in the United States. Approximately 2.7 to 3.9 million Americans Trusted Source are currently living with a chronic form of this infection.

## Hepatitis D

Also called delta hepatitis, hepatitis D is a serious liver disease caused by the hepatitis D virus (HDV). HDV is contracted through direct contact with infected blood. Hepatitis D is a rare form of hepatitis that only occurs in conjunction with hepatitis B infection. The hepatitis D virus can't multiply without the presence of hepatitis B. It's very uncommon in the United States.

Common symptoms of hepatitis



If you have infectious forms of hepatitis that are chronic, like hepatitis B and C, you may not have symptoms in the beginning. Symptoms may not occur until the damage affects liver function.

Signs and symptoms of acute hepatitis appear quickly. They include:

fatigue

flu-like symptoms

dark urine

pale stool

abdominal pain

loss of appetite

unexplained weight loss

yellow skin and eyes, which may be signs of jaundice

Chronic hepatitis develops slowly, so these signs and symptoms may be too subtle to notice.

How hepatitis is diagnosed

History and physical exam

To diagnose hepatitis, first your doctor will take your history to determine any risk factors you may have for infectious or noninfectious hepatitis.

During a physical examination, your doctor may press down gently on your abdomen to see if there's pain or tenderness. Your doctor may also feel to see if your liver is enlarged. If your skin or eyes are yellow, your doctor will note this during the exam.

### **Liver function tests**

Liver function tests use blood samples to determine how efficiently your liver works. Abnormal results of these tests may be the first indication that there is a problem, especially if you don't show any signs on a physical exam of liver disease. High liver enzyme levels may indicate that your liver is stressed, damaged, or not functioning properly.

### **Other blood tests**

If your liver function tests are abnormal, your doctor will likely order other bloodtests to detect the source of the problem. These tests can check for the viruses that cause hepatitis. They can also be used to check for antibodies that are common in conditions like autoimmune hepatitis.

## **Ultrasound**

An abdominal ultrasound uses ultrasound waves to create an image of the organs within your abdomen. This test allows your doctor to take a close at your liver and nearby organs. It can reveal:

- ▢ fluid in your abdomen
- ▢ liver damage or enlargement
- ▢ liver tumors
- ▢ abnormalities of your gallbladder

Sometimes the pancreas shows up on ultrasound images as well. This can be a useful test in determining the cause of your abnormal liver function.

## **Liver biopsy**

A liver biopsy is an invasive procedure that involves your doctor taking a sample of tissue from your liver. It can be done through your skin with a needle and doesn't require surgery. Typically, an ultrasound is used to guide your doctor when taking the biopsy sample.

This test allows your doctor to determine how infection or inflammation has affected your liver. It can also be used to sample any areas in your liver that appear abnormal.

## How hepatitis is treated

Treatment options are determined by which type of hepatitis you have and whether the infection is acute or chronic.

### **Hepatitis A**

Hepatitis A usually doesn't require treatment because it's a short-term illness. Bed rest may be recommended if symptoms cause a great deal of discomfort. If you experience vomiting or diarrhea, follow your doctor's orders for hydration and nutrition.

The hepatitis A vaccine is available to prevent this infection. Most children begin vaccination between ages 12 and 18 months. It's a series of two vaccines. Vaccination for hepatitis A is also available for adults and can be combined with the hepatitis B vaccine.

### **Hepatitis B**

Acute hepatitis B doesn't require specific treatment.

Chronic hepatitis B is treated with antiviral medications. This form of treatment can be costly because it must be continued for several months or years. Treatment

for chronic hepatitis B also requires regular medical evaluations and monitoring to determine if the virus is responding to treatment.

Hepatitis B can be prevented with vaccination. The CDC Trusted Source recommends hepatitis B vaccinations for all newborns. The series of three vaccines is typically completed over the first six months of childhood. The vaccine is also recommended for all healthcare and medical personnel.

### **Hepatitis C**

Antiviral medications are used to treat both acute and chronic forms of hepatitis C. People who develop chronic hepatitis C are typically treated with a combination of antiviral drug therapies. They may also need further testing to determine the best form of treatment.

People who develop cirrhosis (scarring of the liver) or liver disease as a result of chronic hepatitis C may be candidates for a liver transplant.

Currently, there is no vaccination for hepatitis C.

### **Hepatitis D**

No antiviral medications exist for the treatment of hepatitis D at this time. According to a 2013 study Trusted Source, a drug called alpha interferon can be

used to treat hepatitis D, but it only shows improvement in about 25 to 30 percent of people.

Hepatitis D can be prevented by getting the vaccination for hepatitis B, as infection with hepatitis B is necessary for hepatitis D to develop.

## **Tips to prevent hepatitis**

### **Hygiene**

Practicing good hygiene is one key way to avoid contracting hepatitis A and E. If you're traveling to a developing country, you should avoid:

- ❑ local water
- ❑ ice
- ❑ raw or undercooked shellfish and oysters
- ❑ raw fruit and vegetables

Hepatitis B, C, and D contracted through contaminated blood can be prevented by:

- ❑ not sharing drug needles
- ❑ not sharing razors
- ❑ not using someone else's toothbrush
- ❑ not touching spilled blood

Hepatitis B and C can also be contracted through sexual intercourse and intimate sexual contact. Practicing safe sex by using condoms and dental dams can help decrease the risk of infection. You can find many options available for purchase online.

## **Vaccines**

The use of vaccines is an important key to preventing hepatitis. Vaccinations are available to prevent the development of hepatitis A and B. Experts are currently developing vaccines against hepatitis C. A vaccination for hepatitis E exists in China, but it isn't available in the United States.

## **Complications of hepatitis**

Chronic hepatitis B or C can often lead to more serious health problems. Because the virus affects the liver, people with chronic hepatitis B or C are at risk for:

- chronic liver disease
- cirrhosis
- liver cancer

When your liver stops functioning normally, liver failure can occur. Complications of liver failure include:

- bleeding disorders
- a buildup of fluid in your abdomen, known as ascites
- increased blood pressure in portal veins that enter your liver, known as portal hypertension
- kidney failure

- ▯ hepatic encephalopathy, which can involve fatigue, memory loss, and diminished mental abilities due to the buildup of toxins, like ammonia, that affect brain function
- ▯ hepatocellular carcinoma, which is a form of liver cancer
- ▯ death

People with chronic hepatitis B and C are encouraged to avoid alcohol because it can accelerate liver disease and failure. Certain supplements and medications can also affect liver function. If you have chronic hepatitis B or C, check with your doctor before taking any new medications.