

- Moves arms and legs minimally and infrequently; appears stiff.
- Response to loud sounds is absent or minimal.
- Unable to sit alone by age 9 months, Unable to walk alone by 18 months
- Unable to transfer objects from hand to hand by age 1 year

## **Normal toddler child**

**Definition:** - Is a stage of growth and development from 1-3 years of age, it is the beginning of independence or autonomy. It is a time of intense exploration of the environment as the child attempts to find out how things work.

### **Physical growth**

**Weight:** - The average weight gain 2Kgm/year ranged from 1.8-2.7kgm/year. The drop in weight gain at the second year is steeper than for height. This explains why the toddler child looks slim. Formula to calculate normal weight of children over one year of age [age in years X 2] + 8 = weight kg.

E.g. 2 years old child weight = [2X2] +8 = 12 kg.

**Height:** - The increase of height is slow. The total increase of height is 10-12.5cm. The following formula is usually used to calculate normal height of children over one year of age.

[Age in year X5]+80=height in cm

E.g. length of 2 years child = [2X5] +80=90cm

**Head circumference:** - The usual increase in head circumference during the second year is 2.5cm, then until at age 5 years the increase is less than 1.25cm /year. The anterior fontanel closes between 12-18 months of life.

**Chest circumference:** - It continues to increase in size and exceed head circumference during the toddler years, its shape also changes as the transverse or lateral diameter exceed the anteroposterior diameter. After the second year the chest circumference exceeds the abdominal measurement.

**Body proportions:** - The toddler child is taller, leaner appearance; however eh retain a sequel, "pot billed ' appearance because of the less well developed abdominal musculature and short legs. The legs retain a slightly bowed during the second year from the weight of the relatively large trunk. This lateral curvature disappears by 3 years of age.

### **Teething:-**

By the second year of age, primary dentition of 16 teeth and 20 teeth by the age 30 months (2 1/2years).

### **Physiological growth**

**Pulse:** - pulse rate decrease, its range from 80-130 beats/minute, the average is 110 beats/minute

**Respiration:** - 20-30 breath/minute.

**Blood pressure:** - 80/50 mmHg.

**Bowel and bladder control:** - bowel control between ages 18 and 24 months, day time of bladder control between ages 24 and 30 months

### **Senses:-**

- Visual acuity is about 20/40, full binocular vision is well developed by the age of 12 months. Any evidence of persistent strabismus should receive professional attention before age 4 year.
- The senses of hearing, smell, taste and touch become increasingly well developed.
- The skin becomes functionally more mature, the epidermis and dermis are more lightly bound together, increasing their resistance to infection and irritation.
- Hair grows thicker and coarser and usually darkens and loses some curliness. Fine hair is evident on the lower arms and legs

## **Motor Development**

### **At 15 months**

- Gross
  - Walks without help (usually since age 13 months)
  - Creeps up stairs
  - Kneels without support
  - Cannot walk around corners or stop suddenly without losing balance

### **18 month**

- 1- Walks upstairs with one hand held.
- 2- Run clumsily.
- 3- Walks backward
- 4- Pulls a toy behind him and pushiest.
- 5- Jumps in place with both feet.
- 6- Seats self on chair.
- 7- Builds a tower 3-4 blocks.
- 8- Remove simple clothes e.g. shoes.
- 9- Holds cup with both hands to lips and drinks well with little spilling.
- 10- Hands a cup to his mother or drops it on floor.
- 11- Can fill his spoon.

### **24 month:-**

- 1- Run well
- 2- Walk up and down starts.
- 3- Build a tower of 6-7 blocks.

4- Open the door by turning door- knob.

5- Holds cup with one hand.

6- Copies or imitate vertical.

7- Steady gait.

**30 months:-**

1- Takes a few steps on tip toe.

2- Stand on one foot alone

3- Build a tower of 8 blocks.

4- Button and unbutton front buttons.

5- Rides a kiddie car

6- Hand fist.

7- Can throw a large ball 4-5 feet.

8- Copies horizontal or vertical line.

**Language development**

**15 months:** - Says 4-5 words (mainly names).

**18 months:** - Says 10 words more.

**24 months:** - Vocabulary of almost 300 words. Use 2-3 word phrases.

**30 months:** - Talks constantly

Use plurals.

Gives first and last name.

**N.B** The normal child will begin to speak by about 15 months of age, if the child doesn't speak by 2 years old this delay is due to.

1- Intelligence.

2- Illness.

3- Poor models.

4- Negativism

5- Deafness

6- Social and cultural development.

7- Learning two languages at the same time.

8- Sex: boys are usually slower than girls in learning to talk.

### **Psycho sexual development:-**

According to Freud's theory psychosexual development the toddler is in **anal stage**. Pleasurable sensations are focused on anal activity the chief pleasure for the child involves retention or expulsion of feces. The primary contest revolves around toilet training. He believed that personality characteristics are determined by how parents and others treat children during this process. Rigid demands for cleanliness as and for example may result in over attention to as an adult.

### **Social development:-**

According to Erickson's theory of psychosocial development the toddler develop **sense of autonomy Vs shame or doubt** two and 3 years olds are no longer completely dependent on adult they learn that they are someone on their own If children of this age are either not allowed to do the things they can do or pushed into doing something for which they are not ready, they may develop a sense of shame or doubt about their own abilities and fail to develop self confidence. Parents don't help children acquire sense of autonomy by allowing them to do every things for themselves.

### **\*Cognitive development:-**

- Up to 2 years of age the toddler is still in the sensory motor stage (0-2 yrs.) The toddler uses his senses and motor development to differentiate self from objects.
- The fifth sub stage of sensory motor phase is the tertiary circular reaction (12-18 months) in which actions are still repeated and thus

circular. They are no longer carbon copies of each other children now seek out novelty.

- The sub stage six is:- Invention of new means through mental combination (18-24 month). It is the beginning of mental representation - The children now think of an object independent of its physical existence children are now capable of deferred imitation, that is they can observe some act and later imitate it for example before going to bed an eighteen month old may make pedaling motion with the feet, just as the child saw older sibling do while riding bicycle hours before

- Pre operational stage (2-7yrs) which divided into two sub stage pre conceptual (2-4yrs) and intuitive phase (4-7yrs). Toddlers from 2-3 yrs will be in the pre conceptual phase of cognitive development where he is still egocentric and cannot take the point of view of other people.

### **Behavioral characteristics of the toddler**

- 1- Negativism
- 2- Ritualistic behavior
- 3- Slowness in carrying out requests
- 4- Temper tantrums
- 5- Strong expression of emotion

### **Need of toddler child**

- 1- Love and security
- 2- Independence in self care (graded independence)
- 3- Toilet training (Bowel control at 18 months, bladder control in day time 2-3 years, bladder control at night 3-4 years)

### **Care of the toddler child**

I- Physical care: - this will include bathing, dental care to prevent teeth decay, clothing and freedom to play.

II- Sleep: - Toddler child sleep on the average 12-14 hours out of 24 hours, including a day time nap of one to two hours.

III- Safety measures: - The common sources of the accidents among toddlers are

- |                |                            |
|----------------|----------------------------|
| 1- burns       | 2- falls                   |
| 3- Poisoning   | 4- motor vehicle accidents |
| 5- Suffocation | 6- drowning.               |

IV- Health supervision: - Physical checkup, immunization and dental care.

IV- Nutrition: - The toddler age group needs 1200 calories per day, the primary aim in dietary management of this children is to accustom them to chopped foods and to remove all strained food from the diet. The toddler child needs 1.2 gm/kg of protein to meet demands for muscle tissue growth and high activity level, the need for minerals such as iron, calcium and phosphorus is still high.

**The mother should be:-**

- 1- Serve food in small amounts.
- 2- Chop or cut food in to small pieces.
- 3- Serve food which includes all groups as milk, meat, fruits vegetables Cereals, fat and carbohydrates.
- 4- Serve nutrition snacks between meals.
- 5- Give vitamins and iron supplement.

**Parental guidance during the toddler years**

- 1- Prepare parents for expected behavioral changes of toddler especially negativism.
- 2- Prepare parents for potential dangers of the home as poisoning.