

Activities to stimulate vision development in infants

Sometimes the presence of other disabilities, a difficult birth, illness or poor nourishment can make it hard for babies to easily and effectively use their vision or cause delays in visual development. Early intervention often has positive outcomes even when the child has an impairment of the visual system when the baby is provided with careful support and positive, meaningful, experiences. A simple rule is to remember that the brain will choose to invest energy in developing a sensory system that brings useful and interesting information!

Remember, that vision develops in co-ordination with other senses, most particularly with touch and hearing. Helping children touch what they see and see what they touch is one of the simplest, most effective ways to help the visual system.

Birth to one month

While the eyes of the baby looks like the adult eye, the vision is still not as well developed. However, there is much the baby enjoys seeing. Light and shadow, moving curtains, your face as you hold the baby in your arms, and bold patterns in contrasting hues will all attract the baby and hold visual attention. Remember that it is through looking at different things and at different distances that the eyes develop and mature.

Talk softly as you feed the baby – your face is at the perfect distance for your features to be seen clearly and in focus! Babies will make eye contact, but will also focus on your hair line, your moving mouth or anything that catches their fancy. Their attention may initially be fleeting and fragmentary, but soon, you will see the visual attention increase and often a little frown line as they fiercely concentrate on your face.

Place the baby by the side of a window where the light is not too bright and they can watch it filter through a flapping curtain. Talk to the baby lying on the bed, as you walk around the room – they alert to human voices and will soon start to follow you with their eyes as they see your moving shape, especially if you move slowly.

Place one or two toys on each side of the baby so that there is something to look at wherever the head is oriented. Looking is a lot of work, and at this age, the baby can't turn the head or look away very easily, so just one or two will do for now.

One to three months

Babies are able to stay alert and sustain attention longer and if they have spent enough time on their tummy, they would be lifting their heads by the end of this period. This increased

control over their head gives them more control over their eyes and they will easily look at and follow people moving around two to three feet away. The eyes begin to work together a little more efficiently and the result is that the baby begins to perceive distances and beings to reach out to touch things they see, and turn to look at things they touch, both of which help develop their understanding of objects and distance.

When your baby is lying on the back, hang objects at their arm's length on the left, right and directly in front. Select things that tinkle or rustle, things that shimmer and those that have bold patterns. Get pastels along with bright colours so that baby has the full range of things to look at and to practice with. Give them big things to hug and small things that fit in their tiny hands.

Place the baby on the stomach on a single coloured sheet or mat or floor. Babies love watching the plants as they move in the breeze outside or people as they walk around the house doing their chores. The practice they get lifting their heads and holding it steady while watching all that movement is excellent exercise!

If you are not getting eye contact by the end of this period while you are feeding the child, make sure there is good light falling on your face. Sit comfortably, bring the baby closer – at least half the distance at which you would hold the child for feeding and place the hand on your face or mouth as you talk quietly, sing, blow air gently at their hair or whistle softly, letting them feel and hear and stopping to see if they will look as well.

Six to nine months

The baby sees easily at several feet now, and this provides them the motivation to move themselves toward things they see. They will be able to distinguish lighter shades and smaller details, although they are still attracted to strong patterns, bright colours and high contrast. Growing use of their hands and fingers to explore things helps them learn and attend to detail.

Give them everyday items like wooden spoons and small containers that they can easily hold and have different textures. Toys that have details like colourful wheels or dolls with faces that can be felt are all very good to help the child pay attention to small details.

Now use sheets with designs on them – the baby will love to look at the different things as they are on their tummy or pushing up on hands and knees getting ready to crawl. Give them anklets or shoes with little bows or buckles, clothes with large buttons or something attached, so they have many small things to explore with their eyes and fingers, but which are still safe in case they get it into their mouth!

Seat them well supported in a little chair and duck out of sight popping up to their left or right, above or below, near or far and call to have them look and find you. You can play the same game with toys they like.

Seeing the world from many different positions is important at this age – crawling position, lying on their back, sitting up and being carried around as you walk. If the baby has a motor delay, ensure that they experience at least sitting and being carried, giving them the support they need to feel stable and then providing them with interesting things they can see and touch and play with.

Carry them upright so they have a chance to see the world from this new perspective. If the child has motor delay, give them extra support at their chest so that they can focus on the world as it goes by. If you can, carry the child facing forward as you walk so that they see themselves moving toward things.

Nine to twelve months

By nine months, babies should be able to sit independently and play with many things, in many different positions – lying, sitting and crawling, and love to crawl around the house following people and exploring everything. By the end of this period, they will pull themselves up, stand independently, and some will begin to walk. In this process, they learn to interpret the shadows and edges that give us clues about how high or low a step is, how far an object is, how wide or tiny an object is and to grab it.

Make sure the baby has many chances to play and move around in different places – open areas, places where they can safely pull themselves up, crawl under or climb into. They love to dump things out of boxes and baskets by the end of this period, will even put them in. The kitchen offers many rich experiences with its different vessels and containers and things of different sizes and shapes from rice to potatoes. All these experiences will help babies start to develop the capacity to judge size, distance and depth just by looking.

Babies learn so much by observation and imitation. You can play together showing the baby actions they can do with a toy – shake it, bang it, turn it over – and then waiting to give them a chance to imitate. They will enjoy copying simple expressions – batting their eyes, opening and closing their mouth. If they are able to imitate you without any verbal instruction, then you know they are able to use visual information to guide their motor actions – a very helpful ability to have!

Show the baby your family photo album or read a magazine or newspaper together, finding pictures and pointing out familiar things like baby, car or bike. You can talk about the picture adding at least one descriptor – smiling baby, big car, yellow bike.