

Toilet Training Versus Toilet Learning

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Toilet Training is defined as the process of teaching a young child to control the bladder and bowel movements and to use the toilet. From a Montessori perspective, we do not actually “teach”. Rather, we observe what it is that the child needs to accomplish, then we analyze what is the best way to offer the necessary assistance. Assistance can then be given both through indirect and direct preparation. The purpose of any assistance that is given has to be to aid life. An essential element of the Montessori perspective is the knowledge and faith that the child, from conception on, is in a process of self-construction, based upon natural laws of development. We can begin to witness these laws of development by studying the anatomy and function of the body and mind in order to recognize the infant’s cues.

There are basically three aspects of toilet learning. Control of the Sphincter involves the 1) physiological and 2) psychological development of the child, and 3) the assistance provided by the adult. If the child is given the proper assistance, in what nature intended to be the harmonious development and integration of his physical and psychological being, the function of using the toilet with assistance will take place much earlier than previously expected. This depends upon appropriate cultural influences and upon the adult receiving the necessary information and support. Once it is understood, it is difficult not to respect the miraculous system nature has designed. In order to offer the necessary and appropriate assistance, we must take into consideration: how and when the infant communicates his needs, his level of physiological maturation, and how memory develops based on the wiring of the brain and the repetition of experience given to assist this process. As Dr. Montessori noted in the Secret of Childhood,

“The child’s sensibility to order has two simultaneous aspects; the outer, which concern relations between the parts of his environment, the inner, which gives him a sense of the parts of his body, their movements and position. The later we may call his inner orientation. ...Experimental psychologists speak of a muscular sense which allows the child to become aware of the position of his various, members, and which determines a special memory – muscular memory. This explanation has been made the basis of a purely mechanical theory, founded on the experience of conscious movements. If, for example, we move our arm to seize something, we are aware of this movement, memorize it and can repeat it. But the child has proved, on the contrary, the existence of a highly developed sensitive period in respect of the positions of his body long before he can move freely and make any experiments. That is to say, nature prepares a special sensibility towards the aptitudes and positions of the body”. 1

With this in mind, we can help parents to become aware of this “special sensibility” and “sensitive period” that the infant is passing through along with the muscular memory that is developing. The confusion experienced by new parents as they search for information on child rearing practices is overwhelming. They have to wade through the various myths and misinformation propagated by past “experts” in the fields of medicine and psychology. In our

current information age, it is a daunting task sorting out opinions versus science. A Google search for "toilet training" produced 10,800,000 results! The topics pertained to how-to books, accessories such as special potty chairs, toys, dolls for re-enactment, videos with talking toilets, and assorted audiovisual materials for both parent and child.

Consumer-driven cultures are a far cry from the conditions observed by Dr. Thomas Verny in his book "The Secret Life of the Unborn child" (1981), in which he states, "*rural areas of Africa where women carry their newborns, sack-like, on their backs or slung on their sides. Held either way, a baby can easily soil his mother's clothes with his bowel and bladder eliminations. But this almost never happens to an African mother. Somehow she is able to sense his urges in enough time to swing him off her back and hold him away from her before he eliminates. This form of intuitive knowledge is hardly considered unusual. In fact, an African woman soiled by her child after his seventh day of life is loudly branded a poor mother*".² This supports Dr. Montessori's theory of "*the existence of a highly developed sensitive period in respect of the positions of his body long before he can move freely*".³

Thus, it is the mother's intuition and the infant's absorbent mind along with his sensibility of the positions of his body that all work together from the very beginning.

What is also interesting is Dr. Verny's next inquiry: "*how does a three week old or three month old infant know enough to behave the way his culture expects him to?*"² Montessori's answer to this question was that humans go through a process of incarnation which allows them to adapt to the environment and customs of the culture: "*When a new being comes to existence, it contains within itself the mysterious guiding principle which will be the source of its work, character, and adaptation to its surrounding*".³ She further explains how this process begins to work: "*But man must develop his psyche first, and this must accord with the environment and changing conditions in an evolving human society; so nature has taken the precaution of keeping the body inert while both skeleton and nervous system give priority to the development of the intelligence. If psychic life is to incarnate the environment, the intelligence must first observe and study it, must in fact gather up a great number of impressions from it, just as the physical embryo begins by accumulating cells, before starting to use them to build its special organs. So the first period of life has been fixed for the storing of impressions from the environment, and is therefore the period of the greatest psychic activity: is the activity of absorbing everything that there is in the environment*".⁴ In the cited example from Africa, maternal care during the mother and infant's symbiotic relationship is visibly influenced and supported by the surrounding culture. "*How true it is also that in a state of nature a parent or guardian knows intuitively the needs of a child! And how often civilization wipes out this correct impulse and attitude towards a child!....There are instincts that guide growth.*"⁵

It is important to note that maternal behavior is not only influenced by the surrounding culture but also by learned behavior. In cultures where parenting behaviors follow trends, it is important to help parents understand developmental laws that function universally. By imparting a sound knowledge of anatomy and physiology (in this case the alimentary and elimination process), as well as their psychological counterparts, we can help parents and caregivers assist children in their process of self-construction; hence gain control of their sphincter muscles. In *What You Should Know About Your Child*, Dr. Montessori states,

"...True knowledge is direct knowledge of reality and at every stage of progress it is necessary to refer back to Nature to test and verify facts and knowledge. Going back to Nature reawakens and resuscitates those instincts and impulses which are there for the protection of the species". 6

Anatomy Of The Alimentary System

This rather complex yet miraculous system follows an intricate sequence. The alimentary canal is the tubular passage between the mouth and the anus. It includes the organs through which food passes for digestion and absorption, from which elimination is expelled as waste. The task of the digestive system is the physical and chemical breakdown of food. The digestive tract includes the mouth (tongue), three pairs of salivary glands, pharynx, esophagus, stomach, pancreas, liver, gallbladder, small intestine, large intestine, rectum, and anus. Following ingestion, the digestive organs process food and fluids so that nutrients can be absorbed from the intestines and circulated throughout the body. Peristalsis is the sequence of involuntary muscle contractions which occur throughout the digestive tract in waves and move food down the esophagus to the stomach in approximately 4-8 seconds. There are thousands of different digestive enzymes which act to split large molecules of food into smaller units for absorption. Digestion in the stomach usually takes two to four hours. The gallbladder assists in the digestion of fats.

The peristaltic action moves the masticated food through the stomach towards the small intestine again by waves of contractions. The pyloric sphincter at the exit from the stomach opens and closes, allowing it to pass into the duodenum a small amount at a time. The small intestine continues to move the masticated food by peristaltic action and mixes it further with other digestive enzymes by segmentation, so it can be further digested and nutrients are absorbed. Segmentation is a sequence of muscular movements in which segments of the intestine alternately contract and relax, repeating the pattern up to 16 times a minute. The transit time for masticated food to pass through this section of digestion is usually three to five hours. Peristalsis continues to push the undigested food through to the large intestine and colon, wherein nearly all of remaining water is absorbed. It can take from ten hours to several days for the remaining residue, dead cells, and bacteria to be solidified as feces. As time passes, the colon walls begin muscular movements of peristaltic waves. Haustral churning or mass movements (occurring two or three times a day) move the feces towards the rectum. The defecation reflex muscle reacts to this stimulation, and muscle contractions move the feces into the anal canal where the anal sphincters relax to allow the feces to be eliminated from the body.

Once food is swallowed, the body completes this entire process unconsciously and involuntarily. It is important to note that, as the system matures, 'voluntary' contraction of the abdominal muscles can aid the defecation reflex, and 'conscious control' can override the reflex and keep the external anal sphincter closed.

While digesting solids, the body is multitasking: The urinary system filters the blood, removes waste products, salts and excess fluids and also regulates the amount and composition of essential fluids that maintain our chemical balance. Two kidneys, the ureters, the bladder, and the urethra make up the urinary tract. Each kidney filters and removes waste products from the blood through approximately one million filtering units (nephrons) and glomerular capillaries. The remaining filtrate becomes urine. Urine passes down the ureters, where it collects in the bladder. The bladder expands as it fills with urine. The urethral sphincter, a voluntary muscle, remains closed until the bladder is full. When it is relaxed, urine is released and passes through the urethra. Again, the body completes this entire process unconsciously and involuntarily. Our lack of both understanding and admiration of (at the body's natural functions the science behind our physiology) is where our first revulsion too often begins. Toilet learning or toileting should assist the child to develop the ability to control the two distinct actions for urination and defecation. Nature intended these functions to operate for the survival of the species. However, for the children to control and coordinate these actions, their awareness of them has to develop concurrently with the maturation of the systems involved.

If we understand that throughout pregnancy the fetus has been preparing herself for all that she will need, we can appreciate the foundation that was laid for those inherent physiological functions, which are normally taken for granted. Consider the developmental process through which the infant has constructed herself. Therein we can perceive all of the direct and indirect preparations for what she will need subsequent to birth for her survival.

Preparation In Prenatal Life

At one month, the brain, heart and digestive organs emerge in this order, based on their relative importance to the developing organism. From the inner tube, which becomes the alimentary canal, grows the liver and the gallbladder, thyroid gland, stomach, intestines and pancreas. By the end of the third month, stroking of the lips causes a sucking reaction (the movement that will be used to attach, suckle and swallow) and the kidneys soon secrete urine, which is transferred to the bladder and passes via the urethra into the amniotic fluid (thereafter into a diaper). During the eleventh week, tooth buds of all of the twenty temporary milk teeth appear, which in the future will be needed for chewing the first foods and mixing it with saliva. Remember, digestion begins in the mouth. At this point, however, the mother's body still digests the fetus' food, breaking it down into a molecular size, which it can diffuse through the various membranes, and into her blood vessels. Before the fetus can re-synthesize in protoplasm for itself, it must produce over 20 million glands in its digestive tract. As early as the fourth month of intrauterine life, the fetus can swallow amniotic fluid. This muscle action, although weak, aids in the formation of fecal matter, called meconium. He then begins the work of moving his lungs and intestines. He is also preparing the respiratory muscles, the diaphragm, periodical and rhythmic movement, movement of the tongue (for future compressing of the nipple and pressing food to mix with saliva), and slight digestion of water. The intestinal tract is not at this point required to digest or absorb food; nevertheless, it develops the capacity to assume these functions with relative ease at the moment of birth.

With few exceptions, the enzymes necessary for the digestion of simple foods are present at birth. Pancreatic amylase and lipase deficiency exists and persists for several months.

Therefore, the baby is able to absorb proteins and carbohydrates, but only poorly absorbs fat. The first milk, colostrum, provides the baby with the nutrition required for him to subsist in a new and different environment. It is very high in protein, and rich in antibodies, which are attached to the proteins. Colostrum provides the infant with food that is easily digestible. It lacks fats at first but its fat content increases daily according to the extent of digestive maturation. Colostrum acts as a natural laxative, which helps the intestine to clean out secretions. These first feces (meconium) are a concentration of dead, greenish cells from intrauterine life, which accumulated in the unused intestines. This first excrement is black and tarry in consistency.

At birth, the kidney must begin to function as an excretory and a regulatory organ, but renal functions are limited. When the organ is under stress, its efficiency is decreased even further. Maturation of the kidney function is a gradual process, so care must be taken to limit the solute load and keep the fluid intake high. The first voiding may occur just after delivery and should be recorded. It is important to prepare new parents for what to expect with regard to the "differences in feces" to avoid any unfounded concern and to be comfortable from the beginning with their babies normal bodily function. The composition and digestion of breast milk and formula create differences in frequency, viscosity, smell, color and consistency of feces.

One can only marvel at the perfect design of a system that functions from the moment of birth while gradually transforming itself physically and psychologically into its mature form. This leads us to the foundation from which psychological development is constructed. Myelination develops as the body continues to multitask. The central nervous system's bundles of nerve fibers branch out and extend throughout the body to form the peripheral nervous system. This autonomic system controls involuntary actions: for our purposes the digestive and alimentary canal, the sensory nerves which transmit information from around the body, and motor nerves which transmits signals or waves of electrical currents from the brain to the voluntary skeletal muscles. These skeletal muscles include the urethral outlet, abdominal muscles and external anal sphincter. Myelin is the fatty substance encircling and thus insulating the axons. Myelination assists the central and peripheral nervous system to connect the brain to the muscles. The peripheral nervous system picks up signals via sensory nerves and returns information back to the central nervous system for interpretation, which in turn loops the information back to the peripheral nervous system. Through the medium of peripheral nerves (spinal and cranial), information concerning the dynamic state of one's external and internal environment is conveyed to the central nervous system, from which appropriate motor responses can be forwarded to the muscles for action. Thus, we have the ability to feel, interpret, think and act.

The biological process of myelination takes place from birth to approximately twelve months, or when the child is able to stand. The only motor fibers that are myelinated at birth are those in the mouth for suckling and in the throat for swallowing. As each area becomes myelinated, the brain is able to control voluntary and involuntary movements of the body in each corresponding area. Over the following twelve months, myelin progresses from the head

to the legs and feet, and from the trunk to the arms and hands. As myelination progresses, the length of time between urinating grows due to the increasing strength of the bladder. Hence, at one month, the infant can control his eyes; by two months, his head and neck; by four months, the upper chest, arms and hands; by six months, the trunk and back so that he can begin to sit. Physically, the child who is able to sit without support can control and coordinate his bladder, urethral sphincter and anal sphincter muscles. By eight months, the child uses her knees for crawling; and finally, at approximately one year, the legs for standing. By this time, all the voluntary muscles are functioning and can be directed by the will.

Anatomy Of Perception

Through the nervous system, pain/temperature receptors (for sensing warm or cold, wet or dry, irritated rash) generate an impulse that travels to the spinal cord through a sensory neuron. Touch/pressure receptors and muscle position/stretch receptors also generate an impulse that travels to the spinal cord through sensory neurons to detect how the body is positioned (e.g. when supported in a sitting position). The frontal lobe contains the impression of future and past time (e.g. I peed, I am peeing, I need to pee). It is concerned with projecting, reasoning, aggression, olfaction (smell), speech, and imitation of movements, both voluntary and postural (imitating parents, siblings or peers using the toilet). The parietal lobe is concerned with the recognition of specific sensory stimuli (i.e. recognizing an object one has seen before such as a diaper, a potty or a toilet, urine or feces) and being able to make that connection. The parietal lobe is also concerned with the ability to use symbols as a means of communication/language and the ability to develop ideas and determine the necessary motor responses to carry them out (crawl or walk into the bathroom). The cerebellum is concerned with equilibrium and position sense, control of muscle tone, and overall coordination of muscular activity (ability to climb on or back up to a potty chair or toilet).

The second phase of this psychosomatic unification is "personalization". This pertains to how handling of the child reinforces the "union between the body and the mind". Personalization assists the child to better distinguish what is internal or external so that the body-scheme becomes precise and refined.

Role Of The Adult

In *Understanding the Human Being*, Dr. Montanaro notes... *"[S]omething that is extremely important for the development of the human being is the unification of the two parts of our ego – the body and the mind. The first step towards this unification is called "integration" and it is established during the symbiotic period (first eight weeks) through the way of holding the child".* 9

Due to the human newborn's helplessness, he is dependent on a caregiver for his survival. Elimination begins at birth. Whether the caregiver realizes it or not, toilet learning begins with the care given to clean the first meconium. With the assistance of caring and nurturing

adults, the infant will quickly realize the difference between being soiled and being clean, wet or dry. In order to educate the infant to the pleasure and comfort of being dry, it is important to change him every time he or she is wet always gently wiping from front to back; though we must never disturb him while he is asleep. The goal is for him to be a conscious and active participant in the process. Montessori recognized, *"It is at the early age of one month that the child begins to need these calls and invitations from the outer world...repetitions are needed to awaken his interest. To create a cycle of acquaintanceship..."* 10

At around two months of age when the baby is able to hold his head up, the nursing mother will know her infant's rhythm, elimination habits, and signs. By knowing the infant's rhythm, a caregiver can usually predict when the gastro-colic reflex will occur following a meal. As the bladder grows and retains more liquid, the infant will usually urinate upon waking from a night's sleep or from a nap. Signs may include watery eyes, disturbed facial expressions (may indicate 'pushing'), and/or fussing or through sounds similar to "heh" or cries indicating discomfort and the need to eliminate – in which case we offer him the pot. As food is never to be forced on the child, this same principle should always be applied to toileting. *"This is a great achievement for a mother and it requires great love and patience. She must simultaneously feed the body and the spirit, but the spirit takes precedence."* 11 This requires love and patience from the mother or caregiver.

At the anticipated moment, the adult should hold her infant comfortably and securely over a small pot or bedpan, which should have smooth rounded edges.

The infant's back is supported against the mother's chest with one hand under the infant's thighs. The opposite is hand holding the chest. In this way, we provide the infant the experience of the proper position for the action he needs to take. After voiding or a bowel movement, the pot is removed with one hand and the child is then wiped gently from front to back with a moist soft cloth.

If this is carried out calmly without conversation, and without a show of appreciation or reward, the infant will soon begin to realize that what he is doing is a natural, normal and "private" experience. Due to the child's developing sense of self, it is very important not to give either positive or negative suggestions or responses. As with any work, it is done for the intrinsic rather than extrinsic value. If the adult responds unnaturally, for example with applause, then the infant may try to manipulate and control the adult through withholding these functions, and possibly develop a pattern of constipation. In some cases, this is the only thing the child feels he has control of (a deviation in adults referred to as 'anal retentive'). Or if the adult responds with disgust or repulsion the child will internalize that attitude toward his bodily functions. From the beginning the child has no preconceived idea or prejudice towards what his body has produced.

The routine of changing wet or soiled diapers provides an opportunity to develop the caregiver's relationship with the infant and should not be rushed. We need to remember that *our repetitive actions serve to awaken the child's interest.* Our conversation should be natural and revolve around what we are doing *with* the infant. From the very beginning we model a

collaborative relationship. This is an important time of face-to-face contact without distractions (no mobiles hanging over the changing table).

It is important not to use plastic diapers because they wick away the sensation of being wet for the infant. Cloth diapers are preferred. The use of plastic diapers can present one of the first obstacles in the child's developing self-awareness because it allows her minimal sensorial feedback about the function that she just completed. Another obstacle can occur when parents do not have the financial resources to purchase sufficient amounts of plastic diapers, since they may consequently change the infant less often by trying to stretch out their use. After being constantly surrounded by water during intrauterine life, the baby after birth experiences for the first time the sensation of dryness on his skin. If the infant remains in a wet or damp diaper, he gets the impression that some parts of his body remain wet, and he absorbs this sensorial impression as normal. Another obstacle presented with plastic diapers is their lack of "breath-ability". Body heat and urine create an optimum environment for the growth of bacteria and yeast, and consequently, diaper rash. Pain and discomfort give the body misinformation about the genitals and the functions of elimination.

"Feeling provides the first impulse...only later with the progressive development and coordination of movement will he be able to isolate his various activities". 11

At approximately four months, the adult should replace cloth diapers with cotton training pants. These are slightly thicker in the crotch than thinner cotton underpants and are more absorbent, yet less bulky, than diapers. It is important that the underpants feel comfortable and do not bind or restrict the groin area, so that the child is able to move freely in them. Once the infant is able to sit on the potty chair without help, he should be limited to only a few minutes. A small, stable, yet comfortable potty should be placed in the bathroom, where he will be able to crawl to and from independently, according to his need.

It is not uncommon for infants to crawl into the bathroom and urinate on the floor in front of the toilet. The awareness is clearly "this is the place where I "go". However, the ability to climb onto the toilet is not yet developed, due to lack of equilibrium.

A child size toilet seat insert is also helpful for the child's comfort and sense of security when sitting with support on an adult size toilet. Once again the adult assists the child while sitting for brief but frequent visits to the bathroom.

Backing up to a seat and sitting down is quite difficult for very young children. They feel insecure not sensing what is behind them. A Potty chair with arms offers something to hold on to for both sitting down and when standing up.

According to Dr. Montanaro, the second phase of this psychosomatic unification is "personalization". *"Personalization" is founded on the body's functions. Through them the child's whole person will continue to be unified. The human being will begin to associate physical needs with the pleasure of satisfying them in a human way". 12* This pertains to how handling of the child reinforces the "union between the body and the mind".

Personalization assists the child to better distinguish what is internal or external. Since personalization is based on physiological functions, it is important that the adult recognize the needs communicated by the infant and responds appropriately at the right time. The infant's brain is wired and his memory develops based on the repetition of experiences he has been given to assist his learning process.

"The "developing person" within the child, which we refer to as his ego, will strengthen according to the care-giver's ability to satisfy the child's expectations about the needs that arise at different times of the day. The child learns that he can expect a response to his needs and experience his power in calling for his mother. When the child has a need, asks for it, and receives a positive response he experiences having the right control of his environment". 15

As explained , the physical preparation for digestion, urination, and defecation was developed in-utero. From the moment of birth, the physical reflexes are present and they begin the gradual maturation process. If we want to assist the child in controlling the sphincter muscles, we must give the child the proper information from the beginning. Then, it is only a matter of how and where to offer appropriate experiences.

Remedial Toilet Learning In The Infant Community

If the child is over two years of age, we have to give the child the responsibility for his functions. We need to be respectful of the child's need to transition into his new environment. When he joins the Infant Community, the adult needs to allow him some time to develop trust and confidence in the new adults and the new environment around him. We begin by talking to the child and letting him know that, "Everybody here uses the bathroom". It is also important to give him choices, such as, "Which color underpants would you like to wear?", or "Do you want to go to the bathroom alone or would you like me to go with you?" When communicating with a very young child, it is important not to show *any* emotion and to be 'very matter of fact'. Some adults have an aversion and negative attitude toward these natural processes due to their own childhood experiences of having been punished, shamed, or embarrassed. It is very important that any adult working with young children have a natural and accepting attitude with regard to these bodily functions and use the proper language for these functions and their associated body parts (bowel movement, urine, penis, etc.). This will help the child to realize that these functions are a natural part of our every day experience and are essential to maintaining a healthy body. In the Infant Community, older or more experienced children are very helpful as role models for the less experienced newcomer. At home, the child should be allowed or invited to observe the parents when using the bathroom. Montessori reminds us, *"A child's constructive movements have a psychic origin and are of an intellectual nature. Knowledge always precedes movement. When a child wishes to do something, he knows beforehand what it is. He has seen another do something and he is anxious to do it himself". 16*

With regard to 'remedial-toilet learning', we have a responsibility to help the child transition from an unconscious state of what he is doing to the conscious state, and thus from isolation

to social organization, through his physiological and psychological interactions. As human beings, we have the potential to continually learn. The adult will need to exercise patience and understanding for a child who has not had this earlier preparation, who was not assisted during his sensitive period for toilet awareness, and/or whose bladder and bowels have physically matured but who has been conditioned to use plastic diapers. Without some level of experimenting and receiving 'biofeedback', the child can lose awareness of the results of his actions and become detached from that part of his body. This child has to recover his awareness of his bodily sensations, which are associated with these natural functions. The experience of wearing underpants will provide new sensorial information, as will the feeling of the urine going down his legs, hearing and seeing the puddle forming on the floor, and (depending on his diet) smelling the odor it may produce. The parents need to understand the order of how the older child will begin to communicate. For example, at first, this child will generally tell the adult *after* he has wet himself. As he becomes more aware of his body and the control he can exercise over it, he will tell the adult *as* he is going (and try to hold himself with his hand, cross his legs or "dance"). Finally, he will reach the awareness to tell you *before* he has to go.

To encourage this process, the adult can help the child when he arrives to always take a turn on the toilet (even if he is already wet) and change in the bathroom. By showing the child and letting him feel the wet underpants, and saying, "these are wet"; then saying with the dry underpants, "these are dry". As we explained earlier, the sphincter is a voluntary muscle and hence must be controlled, not only by the muscles but also by the desires of the child. The child needs to *want* to do what he is physiologically capable of doing. *"The muscles as they grow strong, await a command of the will to coordinate them. A child develops not simply as a member of the human species but as a person"*.¹⁷ The older child can help empty his bowel movement into the toilet. He soon realizes that sitting on the toilet is more efficient. The child will then place the soiled or wet underpants into a pre-labeled (with the child's name) plastic bag or lined washable bag.

Specifics About Toilet Learning In The Home Or Infant Community

For the child to be successful, the adult needs to prepare the environment to assist the child in developing his independence. A small bench or chair should be provided for the child to sit on, to undress and to dress himself, as he learns to maintain his balance. A dual-purpose step stool will help him to reach the sink, hand soap and towels. Extra underpants of various colors can be kept either in the child's cubby or in the bathroom. Offering a choice of color will often prevent a power struggle from developing. It is recommended that a size larger than what fits should be purchased, in order to allow for shrinkage (Remember how difficult it was to take off a wet bathing suit. Taking clothes off independently comes before being able to put them on). Outer clothing should be simple to allow for easy undressing and dressing, which encourages independence. In the beginning, underpants with short tee shirts are recommended. As soon as possible, the child should be dressed completely.

Tee shirts or dresses that hang down past the waist present an obstacle to the child's ability to coordinate the movements necessary to pull up the shirt and hold it out of the way, while

trying to push down the underpants. To undress, have the child stand in front of the bench or stool. Encourage him to push down his underpants to his knees. To aid his developing equilibrium, ask the child to sit down and then lean forward and continue pushing the pants down to his ankles. Remember he is trying to keep his oversized head in balance when standing on his little legs. Ask him to lift out one foot then the other (naming left foot or right foot).

A full-length mirror will help the child to see the different steps in the dressing process. While the child is still sitting on the stool, hold the dry underpants by the waistband and stretch it open to show the child the two leg holes. "There is one hole for your right foot and one hole for your left foot". Then place the underpants on the floor front facing up. Encourage the child to pick them up and place his foot in the hole. Once both feet are inside the leg holes, demonstrate how to pull up the underpants up to his knees by holding the waistband on either side. Next ask the child to stand up (in front of the mirror) and demonstrate holding the waistband now with one hand in the front and the other hand in back (by the label, rather than at the sides). This will facilitate pulling the underpants up over the buttocks. The adult should collaborate with the child whenever possible. Remember, *"repetitions are needed to awaken his interest. To create a cycle of acquaintanceship..."*. [ref.10]

Once the child is able to stand up, we no longer lay him down to be changed. Laying him down gives him the wrong message: that he is not capable of being independent. We need to always keep in mind the motto Montessori learned from the children: "Help me to help myself". As soon as a young boy is able to walk without support (developed equilibrium) in the Nido, he can be shown how to pick up and hold (tilting slightly) a small plastic potty (up close covering his penis) to catch all his of urine. This serves as a direct preparation for being able to stand and aim his stream into the toilet or urinal.

It is up to the adult to take every opportunity to invite the child to participate in the toileting routine. "Come let's take a turn in the bathroom", is an invitation that does not set the adult up for a "no" response from the child. Other invitations include, "Would you like to turn the light on?" or "Let's go and wash our hands." In the Nido and Infant Community, toileting should be a regular experience and activity. Both the parents and Infant Community staff are responsible for introducing the child to proper hygiene practices, which have the principal purpose of maintaining and preserving health and the practice of cleanliness. These practices include: how to wipe with toilet paper in the West or which hand to use when washing with water (in India), always washing hands after using the toilet, etc.

As with the newborn, it is important to record when the child defecates or urinates. We recommend that a chart be kept on the bathroom wall to facilitate record keeping. This will help the Assistant to Infancy begin to anticipate the child's natural rhythm and make sure to invite the child to visit the bathroom routinely throughout the day, i.e. when they first arrive, prior to snack, prior to going outside, prior to lunch, before and after nap, before going home, etc. This information is shared with the parents and will help them to become aware of and maintain the child's routine at home. Bags for wet/soiled underpants should be pre-labeled for going home. We encourage the parents to be as consistent as possible, keep extra

underwear available, and place a rubberized lap pad (or a plastic bag) under a folded towel in the car seat to simplify cleaning up, should the child wet himself while riding in the car. At home, the mattress should also be covered with a rubberized flannel pad. The less stress the parent feels, the more success the child will have. Another important factor is the child's diet and water intake, which has a direct effect on his 'regularity'. This will make anticipating when to invite him to the bathroom easier, as well. Information in the form of articles given to parents on the health and environmental risks caused by disposable diapers can encourage parents to abandon them sooner. A practical suggestion for parents is to keep on hand a small spray bottle of hydrogen peroxide (which will kill 95% of germs) or a biodegradable wipe, to clean off public toilet seats. This will help the child to be able to respond to his need and go to the bathroom anywhere without fear. It is helpful to demonstrate to parents how to change the child standing up as soon as the child is able because changing tables are not always available. Only by doing things in the appropriate way can we truly assist the child.

Montessori reminds us, *"No one can be free if he is not independent, therefore in order to attain this independence, the active manifestations of personal liberty must be guides from earliest infancy. From the time that they are weaned, children are making their way along the risky path of independence". 18*

Concluding Remarks

It has been nearly thirty-three years since our first lectures on "Control of the Sphincters", presented by Dr. Montanaro in Rome, Italy. In my early parent information classes in the mid '80's, parents listened politely but were incredulous at the idea of offering an infant of two months a small pot to support him over to relieve himself. It appears that little by little the idea has gained momentum. In the Orlando Sentinel Newspaper, October 5, 2005, a surprising headline read: "Potty training: Time for a change!" The subtitle followed with, "Ditching tradition, some parents teach babies a few months old to use the toilet." 19 If parents are in need of support, the nonprofit group [Diaper Free Baby](#) can help. As of 2005, 77 groups had formed in 35 states. In an article published in an issue of Baby Dallas, "Bringing Up Baby – Elimination Communication! Forget Diapers – Potty Training Begins at Birth", Lisa Poisso, writes *"Elimination Communication "EC" is considered to be a gentle process that follows the infant's cues and needs. It is not "training" and it is never punitive, coercive". 20*

I would like to clarify that there are a few discrepancies between this current trend and Assistant to Infancy's or the Montessori approach. For example, with Elimination Communication, the parent is encouraged to make "psss" sounds when the child urinates, or to grunt when the child has a bowel movement. Other suggestions they make are that you read or sing to the child as he sits on the potty while you wait, or have potty chairs placed around the house for convenience.

Adults need to understand that the very young child is in a sensitive period for order and the bathroom is where physical care related to hygiene should take place. The role of the adult is to help the infant or child arrive at the appropriate place (the bathroom), to gently and securely give physical support, only for as long as necessary, and to refrain from

conversation. With young children, we must remember, all our actions give both a physical and psychological message. We model for the child respect and privacy, so that toileting will become a private activity, culminating in independence for the child. We must always bear in mind that education should be an aid to life, which leads us towards the path of independence.

In conclusion, if we prepare adults to understand the functions of the alimentary system, create an accepting environment that follows natural laws of development, meet the needs of the child by giving the appropriate assistance with an accepting, loving attitude, and trust the child in his self-construction, the child will achieve independence with these functions by his own efforts.

"Every child who has been freed, who knows how to care for himself, how to put his shoes on, to dress and undress without help, mirrors in his merriment, the reflection of human dignity; because human dignity is born of the sentiment of one's independence".²¹

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