Breastfeeding is defined as a woman feeding an infant with milk that comes from the woman’s breast, or breast milk. Breast milk provides many benefits to the infant, such as delivering the proper amount of nutrients. Although breast milk provides several benefits, women can find it difficult to breastfeed due to the amount of time it takes to breastfeed an infant, especially if women have to go to work.

Throughout The Milky Way, Davidson narrates the film, which features presentation slides that show information and testimonials from women who discuss their experiences with breastfeeding in the US. At the beginning of the film, Davidson and other interviewees discuss the historical depiction of breastfeeding in art and the history of breastfeeding. As the film progresses, Davidson and Molnar travel to Europe to observe how breastfeeding is viewed there compared to the US. As the film concludes, interviewees describe the difference between breast milk and formula, then Davidson emphasizes how people can support women breastfeeding.

The opening of The Milky Way shows a mother breastfeeding her infant, while Davidson stands beside her. Davidson explains that her personal work experience has been as a registered nurse in pediatrics for thirty years. Davidson adds that during the first ten years of working in pediatrics, she worked at the Children’s Hospital of Los Angeles in Los Angeles, California, in the infectious disease ward. Davidson discusses that after working in the infectious disease ward, she joined the practice of pediatrician Jay Gordon and has worked as a nurse and has been the lactation consultant for the last fifteen years. Next, the documentary introduces Gordon, who explains that his pediatric practice is breastfeeding-friendly, which means the practice assists women in breastfeeding.

After the introduction of Davidson and Gordon, the documentary shows a presentation slide about the statistics of breastfeeding in the US, followed by Davidson and other interviewees discussing the history of the depiction of breastfeeding in art. The presentation slide states that, in the US, 15 percent of infants are exclusively breastfed to the age of six months, which is one of the lowest percentages in the world. Then, Davidson demonstrates that women around the world have been breastfeeding for centuries by showing historical artworks that depict breastfeeding. Next, the film introduces Charlene Vilasenor Black who works in the art history department at the University of California, Los Angeles or UCLA in Los Angeles, California. Black notes that famous artists, such as Leonardo da Vinci, Marie Cassatt, and Pablo Picasso, all painted images of women breastfeeding.

As the film continues, Davidson narrates further about the history of breastfeeding and how the importance of a nursing mother has faded in less than a century. Davidson says that the first milk pasteurizers were commercially produced in 1882. Milk pasteurizers utilize a process called pasteurization that heats milk to a specific temperature for a set period of time to kill harmful bacteria. According to Davidson, pasteurized milk became widely available a couple years later, and companies such as Nestle and Carnation created baby formula as a substitute for breast milk. Davidson continues to narrate that by the end of World War II in 1945, most infants were being bottle-fed with formula in the US. According to Nancy Williams, an author and marriage and family counselor, the increase in infants being bottle-fed was prompted by the war, because more women were going to work and bottle-feeding formula freed up time for the mothers. Davidson notes that the US breastfeeding rates had dropped by 20 percent by 1956, because the attitude the general public had towards women breastfeeding was disgust and many associated it with the uneducated and lower classes. According to Davidson, doctors openly encouraged women from breastfeeding, and in the 1960s, formula companies began to increase marketing campaigns, targeting developing countries.

Continuing the film, Davidson discusses what she hopes to change about peoples’ view on breastfeeding in the US. Davidson narrates that Molnar, a registered nurse, is her mentor and both women want to normalize breastfeeding in the US. Davidson explains that she wants to restore the nursing mother to a place of honor and her goal is to verify that every mother has the tools and knowledge needed to successfully breastfeed. According to Davidson, people associate breastfeeding with feeding an infant, when according to her only 10 percent of what occurs biologically during breastfeeding is nutrition. She claims that the remaining 90 percent of what occurs during breastfeeding benefits the infant’s brain.

The opening of The Milky Way shows a mother breastfeeding her infant, while Davidson stands beside her. Davidson explains that her personal work experience has been as a registered nurse in pediatrics for thirty years. Davidson adds that during the first ten years of working in pediatrics, she worked at the Children’s Hospital of Los Angeles in Los Angeles, California, in the infectious disease ward. Davidson discusses that after working in the infectious disease ward, she joined the practice of pediatrician Jay Gordon and has worked as a nurse and has been the lactation consultant for the last fifteen years. Next, the documentary introduces Gordon, who explains that his pediatric practice is breastfeeding-friendly, which means the practice assists women in breastfeeding.

After the introduction of Davidson and Gordon, the documentary shows a presentation slide about the statistics of breastfeeding in the US, followed by Davidson and other interviewees discussing the history of the depiction of breastfeeding in art. The presentation slide states that, in the US, 15 percent of infants are exclusively breastfed to the age of six months, which is one of the lowest percentages in the world. Then, Davidson demonstrates that women around the world have been breastfeeding for centuries by showing historical artworks that depict breastfeeding. Next, the film introduces Charlene Vilasenor Black who works in the art history department at the University of California, Los Angeles or UCLA in Los Angeles, California. Black notes that famous artists, such as Leonardo da Vinci, Marie Cassatt, and Pablo Picasso, all painted images of women breastfeeding.

As the film continues, Davidson narrates further about the history of breastfeeding and how the importance of a nursing mother has faded in less than a century. Davidson says that the first milk pasteurizers were commercially produced in 1882. Milk pasteurizers utilize a process called pasteurization that heats milk to a specific temperature for a set period of time to kill harmful bacteria. According to Davidson, pasteurized milk became widely available a couple years later, and companies such as Nestle and Carnation created baby formula as a substitute for breast milk. Davidson continues to narrate that by the end of World War II in 1945, most infants were being bottle-fed with formula in the US. According to Nancy Williams, an author and marriage and family counselor, the increase in infants being bottle-fed was prompted by the war, because more women were going to work and bottle-feeding formula freed up time for the mothers. Davidson notes that the US breastfeeding rates had dropped by 20 percent by 1956, because the attitude the general public had towards women breastfeeding was disgust and many associated it with the uneducated and lower classes. According to Davidson, doctors openly discouraged women from breastfeeding, and in the 1960s, formula companies began to increase marketing campaigns, targeting developing countries.

Continuing the film, Davidson discusses what she hopes to change about peoples’ view on breastfeeding in the US. Davidson narrates that Molnar, a registered nurse, is her mentor and both women want to normalize breastfeeding in the US. Davidson explains that she wants to restore the nursing mother to a place of honor and her goal is to verify that every mother has the tools and knowledge needed to successfully breastfeed. According to Davidson, people associate breastfeeding with feeding an infant, when according to her only 10 percent of what occurs biologically during breastfeeding is nutrition. She claims that the remaining 90 percent of what occurs during breastfeeding benefits the infant’s brain.
Next, the documentary discusses what happens to an individual's neurons when the individual experiences skin-to-skin contact and the benefits of breastmilk to the immune system. The film introduces Peter C. Whybrow, a director at the Semel Institute for Neuroscience and Human Behavior at UCLA. Whybrow emphasizes that the mother-infant interaction during breastfeeding is important for the infant's developing nervous system. The central nervous system\(^4\) is made up of the brain and the spinal cord. Davidson mentions that during the early stages of an infant's life, over 100 billion neurons are formed in the brain. She explains that if the neurons are not activated by the kind of skin-to-skin contact an infant experiences during breastfeeding, the neurons will disappear. Next, Gordon explains how an area of the infant's brain called the appestat benefits from breastfeeding. The appestat region controls appetite, and according to Gordon, breastfeeding informs the infant that food will always be available when the infant is hungry.

In addition to the benefits to the central nervous system\(^4\), Williams adds that breastmilk contains immune system benefits for both the mother and the infant. Williams explains that if an infant is exposed to a virus or bacterium that the mother has not been exposed, the infant's saliva will change. She describes how the exposed infant's saliva acts as a signal to the mother's body to produce more antibodies, proteins used by the immune system to neutralize bacteria or viruses. Other research shows that infants receive benefits from breastfeeding such as decreased risk of contracting severe infectious disease and increased performance on cognitive development tests. Potential lactation benefits for the mother include decreased postpartum bleeding, decreased risk of ovarian cancer and breast cancer, and decreased risk of menstrual blood loss.

Next, Davidson and Molnar travel to Europe to determine what Europe is doing differently that is leading to their higher rate of breastfeeding. Davidson and Molnar travel to Berlin, Germany, and visit St. Joseph Hospital in Berlin. St. Joseph Hospital was the first hospital in the world to be a certified baby-friendly children's hospital. According to United Nations International Children's Emergency Fund or UNICEF, a hospital or maternal facility is certified baby-friendly once the hospital or facility does not accept free or low-cost formula, feeding bottles, or teats, and has implemented ten steps to support breastfeeding. The film introduces Michael Abou-Dakn, the chief of obstetrics and gynecology at St. Joseph Hospital. Abou-Dakn states that the biggest peculiarity of a baby-friendly hospital is that the staff does not make, in his view, as many mistakes in the beginning of an infant's life compared to non-baby-friendly hospitals. For example, a baby-friendly-hospital does not separate the mother and infant for multiple hours compared to non-baby-friendly hospitals.

Then, Davidson discusses the statistics of the breastfeeding rates from women who gave birth at St. Joseph Hospital and the history of the baby-friendly initiative. According to Davidson, 97 percent of full term infants and 86 percent of premature infants are discharged from St. Joseph hospital being exclusively breastfed. Then, Davidson says that the baby-friendly initiative was launched in 1991 through the effort of the UNICEF and the World Health Organization or WHO. UNICEF and WHO launched the baby-friendly initiative to increase breastfeeding rates world-wide. According to Abou-Dakn, prior to becoming a baby-friendly hospital, breastfeeding rates were decreasing at St. Joseph.

After Davidson and Abou-Dakn discuss the baby-friendly initiative, the film introduces Katrin Bautsch, a registered nurse and the director of the neonatal lactation program at St. Joseph hospital. Bautsch established the baby-friendly program in the neonatal intensive care unit, then created a unit in the hospital where every mother can stay in the same room as their infant during their entire hospital stay. Bautsch notes that even the infants who are ill and dying need to be kept with the parents and stay in the same room. Next, a presentation slide is shown in the film stating that the WHO recommends that all newborns should receive skin-to-skin care regardless of the infant's weight, gestational age, birth setting, or clinical condition. Davidson adds another method of skin-to-skin contact, which is called kangaroo mother care. According to Davidson, kangaroo mother care consists of a mother and infant in constant skin-to-skin contact for most of the day, night, and during breastfeeding. Davidson continues to say that the separation of mothers and infants after birth is unique to the twentieth and twenty-first centuries.

The film continues to discuss the effects of separation between mother and infant following birth. According to a slide presented in the film, one in three women give birth by caesarean section in the US. Of the women who give birth via caesarean section, 87 percent are separated from their newborns for at least the first hour. Next, Davidson narrates that the American Academy of Pediatrics acknowledges the benefits of skin-to-skin contact and recommends that skin-to-skin contact should be hospital policy, yet it is not common in the US. Furthermore, Abou-Dakn adds that several studies show mothers have more sleep, feel better, and are shown to be happier when they sleep with their infants. Molnar adds that infants can smell, locate, and navigate towards the mother’s breast in the middle of the night and latch on without waking the mother. Molnar notes that the process creates a high level of competence\(^5\) in the infant.

As the film continues, Abou-Dakn discusses further the mother’s stay in the hospital and the support and information given to new mothers at St. Joseph. Abou-Dakn explains that the majority of women stay in St. Joseph Hospital between three to five days after birth. Then a midwife visits the women. Every woman receives the help of a midwife for the first ten weeks after birth. The midwife assists in helping the mother breastfeed. Next, Bautsch explains that the staff at St. Joseph release the infants from the intensive care unit or ICU earlier than considered normal and the infants are exclusively breastfed. The infants are not bottle fed nor fed through feeding tubes. According to Bautsch, there are no weight requirements for infants to go home, but the staff verify that the infant can breastfeed, gains weight, and control their body temperature. Davidson adds that since St. Joseph hospital became a part of the baby-friendly initiative, the women who have chosen to give birth at St. Joseph has increased by 110 percent.

As the film continues, Davidson explains her original reason for traveling to Berlin and what she learned. Then, she and Molnar
travel to Stockholm, Sweden. According to Davidson, her original purpose for visiting St. Joseph Hospital was to see the effects of skin-to-skin contact and kangaroo care. Davidson adds that she learned it is not only about hospital policies, but about trusting the bond between the mother and the infant. After Davidson discusses what she learned from their trip to Berlin, she and Molnar travel to Stockholm. According to Davidson, Sweden has one of the highest breastfeeding rates in the world and she notes that there is an increase in women breastfeeding in public compared to the US. While in Stockholm, the film shows a compilation of interviews that discusses how people in Sweden views breastfeeding. According to the film, it is not uncommon to see women breastfeeding in public and there is no shyness about breastfeeds. In addition, women in Sweden get eighteen months of paid maternity leave, which makes breastfeeding easier for women since they are given more time. Davidson adds that a man who goes back to work in Sweden, rather than take the paid paternity leave, is not well-regarded in his company.

Then, Davidson discusses how formula is viewed in Sweden and the international code written by the WHO. Davidson narrates that women who give birth in Sweden do not receive free formula samples at the hospital, nor do they receive free gifts from formula companies in the mail. The reason women do not receive formula is because Sweden follows the international code. The international code, the WHO code, was written by the WHO in 1981. The WHO code states that formula companies should not advertise or provide any gifts of formula to pregnant women or women with infants that are under the age of six months. According to the WHO, the code was written to increase breastfeeding rates. The majority of countries follow the WHO code except for Central African Republic, Chad, Somalia, Iceland, Kazakhstan, and the US. According to a slide presented in the film, 91 percent of the hospitals located in the US distribute formula sample packs to women after they give birth, which is a violation of the WHO code.

As the documentary ends, Williams, an author and marriage and family counselor, explains the components found in breastmilk versus formula, and Davidson and Molnar go back to the US. According to Williams, there are many components found in breastmilk that scientists have not yet identified. Therefore, a formula company is not able to put the same components in the formula to provide the same nutrition as breastmilk. After Williams discusses formula versus breastmilk, Davidson and Molnar return to the US. Davidson explains that one way to help women succeed in breastfeeding is to change laws and encourage businesses to implement family-friendly policies. Davidson says another way to help women succeed is through mother-to-mother milk sharing. Mother-to-mother milk sharing matches mothers who produce too much milk with mothers who do not produce enough milk. Then, Davidson argues that a breastfeeding movement needs to be started and that women should stand up for their human rights. At the end of the film, several women are shown breastfeeding at the Santa Monica pier in Santa Monica, California.

The Milky Way brought awareness to the difference in how breastfeeding is viewed in the US compared to European countries. The film was presented at the 2014 Official Selection Hollywood Film Festival, the 2014 Official Selection Newport Beach Film Festival, the 2014 Official Selection Her Story Cinema Series, and the 2014 Official Selection Choice! Film Festival. The film was also presented at the 2015 Official Selection Belleville Downtown DocFest.

Sources


On 26 April 2014, Gravitas Ventures released the documentary The Milky Way, a film directed by Jon Fitzgerald that compares breastfeeding in the US with breastfeeding in European countries. The film was produced by Piece of My Heart Productions and Cause Pictures. In the film, producers Jennifer Davidson and Chantal Molnar travel to Berlin, Germany, and Stockholm, Sweden, to observe how people perceive breastfeeding there, compared to in the US. Breastfeeding provides multiple benefits to both the infant and mother, including infants developing a healthy immune system and mothers recovering from birth at an increased rate. The film shows how women in the US are inhibited by limited maternity leave compared to women in European countries. The Milky Way provides viewers with information about breastfeeding in the US compared to other European countries and the impact that formula companies have on women and infants.

Subject