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Digital Marketing and Consumer Consumption of Breast-Pumps on Social Media

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Digital Marketing and Consumer Consumption of Breast-Pumps on Social Media

Part 2: The Importance of BreastFeeding

By: Leanne Clark

Submitted in Partial Fulfillment of the Requirements

For The Degree in Masters of Science; Digital Marketing

At

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Digital Marketing and Consumer Consumption of Breast-Pumps on Social Media Part 2: The Importance of BreastFeeding

A Thesis submitted to the faculty of the Digital Marketing Department

Submitted in Partial Fulfillment of the Requirements

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Lindenwood University

By:

Leanne Christa Clark
Saint Charles, MO

October 2024

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ABSTRACT

A breast pump brassiere, designed to provide hands free experience for the mother when collecting mother's milk, and which integrates various operative components in the category of a micro pump, at least one suction cup, and a milk reservoir, preferably within each cup, to provide for hands free collection of expressed milk, as desired and required by the mother for use in the feeding of her infant.

(Clark et al., 2012)

Clark, L. C., Baldi, N. C., & Individual. (2012b, November 19).

US20140142501A1 - Bra With Integrated Breast Pump - Google Patents.

https://patents.google.com/patent/US20140142501A1/en

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I would also like to thank my children Kameron and Nolan. My two boys are my entire world and are the reason I stay motivated to achieve my goals. I want to set a great example for them.

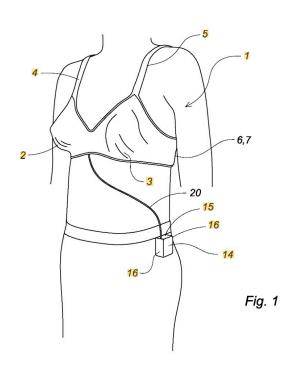
I love both of you more than the sun, moon, and stars!

LIST OF FIGURES

BRA WITH A INTEGRATED BREAST PUMP

Application US13/680,480

Leanne C. Clark



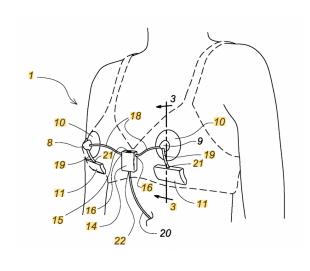
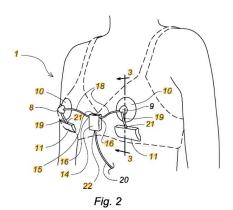
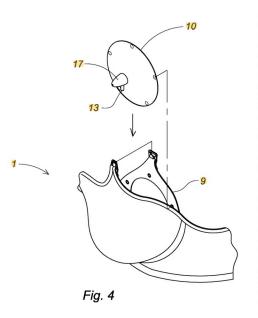


Fig. 2



17 9 17 10 19 Fig. 3



Part 1 : Digital Marketing and Consumer Consumption of Breast-Pumps on Social Media

Consumer Consumption of Breast-Pumps on Social Media

Introduction,

Obviously, brassieres have been available for many, many years. These types of garments have been designed to lift, separate, and restrain the breasts of women since as early as 2000 b.c. Today, the bra is not only designed for support of the breast, it is also applied for fashion, and some bras have facilitated access to allow the new mother to breast feed her infant (Clark).

Social media has become a powerful tool for marketing services and products. It has become a gateway for purchasing products that appeal to consumers. One trend involves the marketing of breast pumps. Breast pumps are used by women who cannot or do not have the time to breastfeed, but still want their infant to have the health benefits of breast milk. The research will explore if breastfeeding/breastpumps are a current trend in social media marketing and influencer marketing, how breastfeeding affects consumers, on social media marketing.

The breast pump industry is thriving and accounts for 1.2 billion dollars of the global economy. In the United States, the industry is valued at 554.5 million dollars in 2022. The market is expected to reach USD 2.86 Billion in 2032. Breast pumps have become a popular way to ensure newborns and infants have access to breast milk. Breast milk provides nutrients that strengthen the immune system, improve healthy development, and reduce the risk of sudden

¹ Becker, Genevieve E. "Measuring Mothers' Viewpoints of Breast Pump Usage." *International Journal of Environmental Research and Public Health* vol. 18, no. 8, 2021, p. 3883.

² Ibid, p. 3883

infant death syndrome (SIDS)³. The use of breast pumps appeals to mothers who have to return to work or the baby has trouble latching on to the nipple. **Thesis**: Social media marketing trends are affecting the consumption of breast pumps due to a great advocacy of La Leche League Internatinal, Doulas, and nursing mothers.

The engagement of consumers using social media has created new marketing avenues. The success of any business depends on its ability to attract enough consumers to promote its profitability. According to Changchit et al., "social media usage increased between 2015 and 2018 from 18 to 32 hours per week, while their online spending almost doubled during this period". The Internet has become a central tool for making sales. Businesses without an online presence, especially on social media, will struggle to remain profitable. Social media is the least expensive but one of the most effective ways to attract consumers. Building a strong social media presence will translate into sales.

The target market for breast pumps is mothers with newborns and infants. In one study, the researchers examined the perspective of mothers on using breast pumps. Researchers conducted a systematic review of 18 random control trials. The results of the study indicated a positive response to operating breast pumps and their benefits in providing breast milk. A majority of mothers in the study believe breast pumps are beneficial for the health of their

³ Lyons, Katríona E et al. "Breast Milk, a Source of Beneficial Microbes and Associated Benefits for Infant Health." Nutrients vol. 12, no, 4 2020, p. 1039

⁴ Changchit, Chuleeporn, et al. "Determinants of online shopping influencing Thai consumer's buying choices." *Journal of Internet Commerce* vol. 18, 2019, p. 1-23.

⁵ Becker, Genevieve E. "Measuring Mothers' Viewpoints of Breast Pump Usage." *International Journal of Environmental Research and Public Health* vol. 18, no. 8, 221, p. 3883.

⁶ Ibid, p. 3883

babies. The study also supports the benefits of using breast pumps for improving the overall health and well-being of the child.⁷

Before a consumer adopts the use of a product, like breast pumps, they must be aware of their existence. Social media is an effective marketing tool for reaching the target market.⁸ It draws in consumers through interactive posts and increases the market reach of the business. Using social media posts, the business can learn the customer's likes and as well as get valuable feedback about the product or service. Social media can assist businesses in developing a large, more loyal customer base. When the business makes connections with the consumer, it creates a lasting impression. When businesses create a social media platform, they open the door to direct communications with consumers. These interactions can expand the business's market reach and improve its brand presence.⁹ Social media increases traffic to the company website and promotes higher sales. Additionally, it is a place to educate consumers and exchange ideas as well as recruit potential employees.

Breast pumps have become an essential tool for the mother to pump so she may partake in a regular work schedule while supplying the child with a natural source of dietary supplement, giving fathers the opportunity to partake in early infant feeding. Women no longer live in a time where they can stay home and breastfeed their children. In the United States most mothers must go back to work after six weeks or risk losing their jobs in other countries around they have implemented different maternity leave policies. The sale of breast pumps has only increased as

⁷ Ibid, p. 3884

⁸ Dodoo, Na and Wu, Linwan. "Exploring the anteceding impact of personalized social media advertising on online impulse buying tendency." *International Journal of Internet Marketing and Advertising*, vol 13, no. 1, 2019, pp. 73-95.

⁹ Dodoo, Na and Wu, Linwan. "Exploring the anteceding impact of personalized social media, 2019

more mothers go to work. Marketing efforts have increased the knowledge and value of breastfeeding. Groups like La Leche League International have led the charge to educate mothers on the importance of breastfeeding. They go to hospitals to educate mothers after they give birth and provide breast pumps for free to low-income mothers.

One way La Leche League International has influenced the use of breast pumps is through social media campaigns. They have used these campaigns to educate the public. The nonprofit organization has organized social media groups across the globe to encourage mothers to breastfeed. A study on breastfeeding support in the United States indicated the La Leche League has been pivotal in increasing breastfeeding practices. The education and support provided by the organization have been especially beneficial to low-income and poverty-stricken mothers.

Social media campaigns by nonprofit organizations support the goals of businesses. In this case, the social media campaigns by La Leche League encourage mothers to purchase and use breast pumps. Breast pump usage is encouraged through exposure to marketing efforts.

Study by McInnes et al. introduced the idea of a breast pump service that is designed to improve breastfeeding outcomes and reduce health inequalities. ¹² The service offers free breast pump rentals, education, and skilled professional support. ¹³ Women used in the study were recruited

¹⁰ Yourkavitch, Jennifer, and Paige Hall Smith. "Women's status, breastfeeding support, and breastfeeding practices in the United States." *PloS One* vol. 17, no. 9, 2022, e0275021.

¹¹ Ibid, para. 2

¹² McInnes, Rhona J et al. "Women's views about a free breast pump service: Online survey informing intervention development." *Maternal & Child Nutrition* vol. 15, vol. 2 (2019), e12745.

¹³ Ibid, para. 3

using social media. Social media was central to attracting the target audience. Thousands of women responded to the social media post.

Social media encouraged pregnant and new mothers to use the service. Posts were designed to highlight the importance of breastfeeding. Additionally, when participants shared the social media posts, they were rewarded with gift cards. ¹⁴ Based on the responses to the post about the breast pump service, social media is a good tool for reaching consumers. Valuable insights were gleaned from the use of social media to educate women on the new service as well as to identify mothers willing to fill out the survey. Researchers were able to connect with the right audience to successfully develop the data they needed to measure the success of the breast service.

Social media is a popular communication medium. Based on Pellegrino, et al. 60% of the world uses social media. 15 In the United States, 84% of adults use social media, and adolescent use is as high as 92%. 16 Businesses in the U.S. and across the globe can take advantage of this large presence. Breast pump retailers can use social media to engage with their target audience and create a larger following. Sales are promoted through creative advertisements and educational posts. Most importantly, social media can help expose consumers to the brand. Businesses that do not take advantage of the opportunity to build their brand and marketing on social media will struggle to remain competitive.

¹⁴ Ibid, para. 6

¹⁵ Pellegrino, et al. The Dark Side of Social Media, para. 6

¹⁶ Becker, G. Measuring Mothers' Viewpoints, 3885

Another study examined the intention of consumers when using social media.

Understanding the intention of consumers can help shape effective posts that draw in the right consumers. The effective utilization of social media can increase the value of the brand. The "Improving the flow of information is essential to ensure effective communication among consumers". When businesses develop effective communication avenues, they are better equipped to connect with the right customers. Survey research from Ahmed et al. was used to gather data from consumers to understand their intention behind making purchases.

According to the results, Internet users access social media to connect to others. It is not their intention to make purchases, but memorable and creative advertisements can draw in the consumer. Businesses that use social media must have influencing power over consumers. Establishing a large number of friends and obtaining a lot of likes is a positive indicator that the business is attracting the target market. Social media can influence users by engaging in interactive communications. Creating persuasive content has the greatest influence over the consumer's buying habits and their intention to make a purchase. Breast pump retailers can use the results of the study to create social media posts that influence the intention of the consumer to buy their product.

Several social media platforms have restrictions/rules about marketing/selling baby goods, breast pumps included, mainly due to FDA regulations considering the breast pump to be a medical device. Though, this particular article does not state any facts or regulations for

¹⁷ Ahmed, Essia R., Rahim, Noor, Abdullah, Tariq, and Thottoli, Mohammed. "An examination of social media role in entrepreneurial intention among accounting students: a SEM study." *Journal of Modern Accounting and Auditing*, Vol. 15, No. 12, 2019, pp. 577-589.

¹⁸ Ibid, 577

¹⁹ Ibid, 586

retailers or department stores. According to Facebook policies and prohibited content, breast pumps are considered a medical device and therefore are prohibited from being advertised or sold through their platform.

Research Design and Methodology

The study applied a social semiotic framework to investigate the ad designs and the messages used to attract consumers to breast pumps.²⁰ Three different messages were evaluated in the research. The messages include (1) breastfeeding and breast pumping have the same purpose, (2) the use of breast pumps enables quality time with the baby, and (3) the use of breast pumps promotes access to breast milk to promote healthy development.²¹ The messages in the advertisements were predictors of the mother's choice to purchase and use breast pumps. Educating the mother on the benefits of breast pumps was the strongest predictor of a breast pump purchase.

Social media posts assist in making connections with mothers. The literature indicates mothers believe breast pumps are an essential component of the breastfeeding experience.²² Women no longer have to worry about breastfeeding in public or expressing milk at certain times. They can pump enough milk to meet the needs of their child even when they are separated. In Australia, advertisements about breast pumps have led to more mothers choosing breast milk over formula.²³ In addition, breast pumps give fathers the opportunity to bond with

²⁰ Ibid, para 5

²¹ Ibid, para. 7

²² Becker, Measuring Mothers' Viewpoints, 3885

²³ Becker, Measuring Mothers' Viewpoints, 3883

their children while ensuring they get the benefits of breast milk. Healthy messages have the greatest influence on the mother's decision to use breast pumps.²⁴ Breast pumps offer mothers and fathers a choice concerning their feeding experience with their children.

Improvements in breast pumps have influenced the mother's purchase decision.

Originally, breast pumps were manual. The development of electric and portable breast pumps has improved the convenience of pumps as well as access.²⁵ Electric pumps have become the most commercialized and commodified out of the breast pump industry. A survey of mothers who purchased breast pumps indicated they would be more likely to purchase breast-pumping products if they had access to educational information.²⁶ Artfully created advertisements or social media posts have a direct correlation to higher breast pump sales.²⁷ New and expectant mothers are the consumers with the greatest interest in breast pumps.

One study involved an online ethnography concerning breastfeeding support on social media. The research examined the experience of expecting or new mothers concerning breastfeeding with the Australian Breastfeeding Association's (ABA) Facebook groups.²⁸ Data was collected from the posts of participating women placed by members of the groups. A total of 778 wall posts and 2,998 comments were analyzed in the research.²⁹ In total, 21% of wall posts

²⁴ Ibid, para. 9

²⁵ Ibid, para. 11

²⁶ Ibid, 12

²⁷ Ibid, 12

²⁸ Bridges, Nicole et al. Exploring breastfeeding support on social media. *International Breastfeeding Journal*, vol 13, no, (2018), p. 22-29.

²⁹ Bridges, Nicole et al. Exploring breastfeeding, 25

involved breastfeeding questions while 44% concerned questions about the use of breast pumps and breastfeeding alternatives.³⁰ According to the results of the study, informational and emotional support influence the expecting and new mothers' likelihood to choose to breastfeed.³¹ Social media groups can influence the breastfeeding decision of the mother. Social media groups would also be beneficial for encouraging the use of breast pumps. If more mothers are informed about the benefits of breast pumps using social media groups, it can translate to more breast pump sales.

Social media provides informational support. If breast pump retailers can establish an authentic presence, they can grow the size of their customer base. When selling breast pumps, it is important to oversee social media interactions to ensure the right message is being relayed through informational posts by retailers regarding breastfeeding initiation rates. ³² Expecting and new mothers are concerned with the health of their babies. Simply advertising breast pumps will not appeal to the target audience. Mothers want to know why a product is safe and beneficial to the health and development of their children.

The past studies would be beneficial in understanding the types of information and communication methods that will most attract the target market to the product. Social networking sites provide an opportunity to connect with consumers with an interest in the product. Peer support also influences purchasing decisions. Social network sites connect people. Expecting and

³⁰ Ibid, 22

³¹ Ibid, 27

³² lbi, 28

new mothers rely on the expertise of others when making decisions about purchases for their children.

Based on a review of the work of scholars, there is a connection between social media sites and breast pump consumption. The arguments presented are valid and help answer the research question. Social media is an important marketing tool, but it also provides a place for businesses to connect directly with consumers. Breast pump sales are influenced by the content posted on social media sites. According to scholars, social media trends involve sharing information to educate mothers.³³ Retailers can use social media to educate mothers on the benefits to the baby when choosing breastfeeding. It can also be used to educate them on the convenience of breast pumps.

Social media is a viable marketing tool for breast pump retailers, but there is a gap in the literature involving the specific research question. There are no studies on social media trends and their effect on consumer consumption of breast pumps. However, there are studies that highlight the benefits of social media for the sales of breast pumps. In a 2016 study, researchers examined the perspective of women on breast pumps. A survey of expecting and new mothers found they have a positive view of breast pumps. Mothers have learned about the health benefits of breastfeeding and the breast pump. One important source of this information was social media.

Social media is an important part of marketing breast pumps to women. Women not only learn about the benefits of breast pumps; they gain knowledge from other mothers and learn

³³ Bridges, Nicole et al. Exploring breastfeeding, 25

³⁴ Crossland, Nicola, et al. "Breast pumps as an incentive for breastfeeding: a mixed methods study of acceptability." *Maternal & Child Nutrition* vol. 12,4 (2016): 726-39.

about the mechanics of the breast pump. Knowledge can be a strong incentive for mothers when making choices about breastfeeding.³⁵ Another indicator of a breast pump purchase identified in the 2016 study was perceived value.³⁶ Women will be more incentivized to purchase breast pumps if the perceived benefits outweigh the perceived risks. Social media posts and other marketing approaches have led to more mothers deciding to breastfeed.

The current trends on social media do not involve breast pumps. Instead, retailers of infant formula are flooding social media feeds. Social media uses personalized marketing software to target new and expecting mothers. They should expect to see a variety of advertisements encouraging the mother to choose formula over breastfeeding. Infant formula makers and retailers use aggressive marketing tactics to persuade mothers. These companies create social media platforms directed at vulnerable mothers and use influencers to encourage mothers to use formulas.

A search of Facebook and Instagram revealed there are hundreds of influencers that discuss the topic of breast pumps. 38 According to "The complete data comprised of 900 social influencers and their social media attributes obtained from different channels. The model is run on the data which is obtained in a 90 day period window". They provide pumping tips and educational information about breast milk benefits for the child. Influencers are compensated for providing links to breast pump retail when the link generates a sale. Some influencers use links that take the social media users to a personal store on Amazon or Etsy. Other influencers provide

³⁵ Crossland, Nicola et al. Breast pumps as an incentive, 727

³⁶ Hastings, G. et al. Selling second best: how infant formula marketing works. *Global Health* vol 16, no. 1, 2020, p. 77.

links to educational information about breast pumps and or they have links to podcasts providing the same information.

Social media affects consumers and consumption by opening doors for businesses to sell their products. Businesses use creative and visually appealing social media posts to persuade consumers to make a purchase.³⁷ According to the literature, social media influences consumers through product discovery, connecting to the brand, and influencing purchase decision-making.³⁸ Users learn to trust brands when they develop a familiarity with them on social media. The use of celebrities and social influencers also creates trust with the user involving the brand being advertised. The same is true for breast pumps. Almost half of all American consumers seek advice from social media before making a purchase.³⁹ They also rely on the reviews of other social media users before making a purchase. Consumers who have previously purchased the product will leave reviews about their value.

Social media outlets have severely restricted the sale of breast pumps. Influencers do not sell the product using social media posts but provide links to shops that sell the products.

Consumers will consult the opinions of social media influencers before making a purchase.

Another way social media influences the buying decisions of consumers is through information gathering. Along with reading reviews and opinions, consumers can compare process and product requirements. Social media is not the same as traditional advertisements where the

³⁷ Ahmed, Essia. An examination of social media role, 780

³⁸ Arora, Anuja, et al. "Measuring social media influencer index- insights from Facebook, Twitter and Instagram." *Journal of Retailing and Consumer Services*, 2019, 12-24.

³⁹ Becker, Genevieve. Measuring Mothers' Viewpoints of Breast Pump Usage, 3883

consumer has no choice but to trust the message. Social media provides a place where the consumer can conduct in-depth research before making buying decisions.

Consumption is much higher with social media marketing. Social media has transformed the interactions between businesses and customers. Customers consider social media a reliable source for researching and making purchases of products. Influencers provide links to breast pumps on user pages that educate mothers. When users follow these links, it can lead to a sale. Millions of people use social media as a way to learn about the products they want to purchase. Positive information about the product and brand increases the likelihood of a sale.

Social media marketing trends can increase the popularity of a product.⁴⁰ The current trend is to encourage mothers to breastfeed. Past generations switched from breastfeeding to formula for convenience. Fewer mothers were staying home with their children instead of choosing to go to work. In recent decades, breast pumps have offered a new alternative to breastfeeding or using formula. The breast pump offers the mother the freedom to work while still feeding the child breast milk. Breast milk is the healthiest alternative for babies. The opportunity to provide the child with breast milk has led to more breast pump sales. Social media provides a popular and inexpensive approach to marketing the product.

While there are restrictions on the sale of breast pumps by anyone but licensed medical product providers, social media has played a significant role in consumer consumption of breast pumps. The trend on social media is to use aggressive tactics to influence expecting and new mothers to purchase formula. Producers and retailers of breast pumps do not use these tactics. Instead, they use social media pages to connect to mothers to provide educational information.

 $^{^{}m 40}$ Dodoo, Na and Wu, Linwan. Exploring the anteceding impact of personalized social media, 81

Educating mothers on the benefits of a product to their children has the greatest influence on buying behaviors.

After reviewing the information provided by scholars, it is clear social media marketing trends are affecting the consumption of breast pumps. The sale of breast pumps has risen because consumers have greater access to information about the benefits of breastfeeding and the convenience of breast pumps. Social media marketing is an effective way to attract mothers to breast pumps and other breastfeeding products. Influencers and social media posts inform and encourage purchases.

Part 2: The Importance of Breastfeeding

The importance of breastfeeding

Introduction

Breastfeeding is one of the most natural and important practices that a mother can engage with, and there are a myriad of reasons why this is important. Perhaps most importantly, breastfeeding provides a natural way for mothers to ensure that their children have sufficient nutrition. Additionally, breastfeeding enables the mother to have a much greater degree of control over what, specifically, her child drinks. This provides many additional benefits for the development of the child. To better understand this issue, it is necessary to take a closer look at breastfeeding, as well as several articles surrounding it, to understand its benefits, methodologies, and applications.

Demographics of breastfeeding

After doing some research to find the demographics of Digital Marketing for breastfeeding and the use of digital marketing for breastfeeding. I found several articles and studies that include the

demographics of how social media is used in the digital marketing and how effective digital marketing is on the target demographic for breastfeeding. Alessandro analyzed images and corresponding comments along with hashtags #breastfeeding #breastmilk #normalizebreastfeeding. "There is evidence that social campaigns can positively impact breastfeeding rates (Snyder, 2007). For example, campaigns in Vietnam successfully raised breastfeeding rates from 26% in 2011 to 48% in 2012" (Sriraman & Kellams, 2016). Due to the use of digital marketing breastfeeding numbers have increased.

This paper discusses the Importance of Breastfeeding followed by consumer consumption of breast pumps utilizing the use of social media to connect with consumers worldwide. Several world organizations such as UNICEF and WHO are aiming to change worldwide legislation on the digital marketing for breast-milk substitutes claiming unethical practices and promotion of breast-milk substitutes. Hopefully this will break the barrier on digital marketing for breast-feeding, and hinder the digital marketing, and the use of milk substitutes for infants. "Countries that have not revised their laws or regulations on the marketing of breast-milk substitutes in the past few years should use this report to identify gaps in coverage of all Code provisions and take action to update their legal measures. The WHO/EURO model law is a tool to help to strengthen national regulatory frameworks to protect infants and young children from the harmful effects of food marketing" (Ching et al., 2021).

Table 1

Total images and associated comments posted on Instagram using the top four breastfeeding-related hashtags from January 9–16, 2017

Hashtag	Total images posted	Total comments posted	Comments per image		
			Mean	Median	Max
#breastfeeding	1,305	5,281	4.1	2	348
#breastmilk	1,120	7,886	7.0	2	2,180
#normalizebreastfeeding	938	4,258	4.5	3	74
#breastisbest	726	3,107	4.3	3	105
Total	4,089	20,532	5.0	2	2,180

Note. From

Marcon AR, Bieber M, Azad MB. Protecting, promoting, and supporting breastfeeding on Instagram. Matern Child Nutr. 2019 Jan;15(1):e12658. doi: 10.1111/mcn.12658. Epub 2018 Aug 5. PMID: 30079555; PMCID: PMC7198963.

Benefits of Breastfeeding

Positive Nutrition

One of the most abundantly clear reasons why breastfeeding is important is that it ensures that children receive the nutrition they need. As Binns states, breast milk contains plentiful carbohydrates, proteins, fats, and vitamins to ensure that children can grow up more easily and much stronger (Binns et al. 7-8). This article implemented a quantitative methodology to examine many of these more subtle elements of breast milk to understand why breastfeeding is so important for babies.

Another nutritional benefit in this regard is that the actual composition of breast milk changes over time, thereby enabling the nutritional requirements of the baby to be able to be met that much more easily (Binns et al. 8-9). It is easy to see how this is important, because this period of the baby's life is its most important, nutritionally, due to the sheer quantity of areas of growth that they experience.

In this regard, breastfeeding is important because it serves as a healthy alternative to more artificial methods, which have been coming under heavy scrutiny lately. For this reason, many mothers choose to engage in breastfeeding simply because it provides a more concrete way for them to be able to be self-sufficient, thereby reducing the risk of exposure to harmful

chemicals and the like that are oftentimes able to be observed in baby formula. For many mothers, this additional safety is worth the exhaustion, time, and effort of breastfeeding, especially from a long-term perspective.

On the topic of nutrition, breast milk can also greatly aid with immune system support.

One source states that breast milk contains numerous antibodies, white blood cells, enzymes, and many other helpful elements that will, collectively, drastically improve a baby's immune system, providing long-term support (Belderbos et al. 66-67). This source utilizes a mixed-methods approach, using a birth cohort study to create both qualitative and quantitative methodologies that can be leveraged here.

Breastfeeding is also important, nutritionally, because of colostrum. This chemical is particularly important when it comes to breastfeeding because, as another source states, it can help provide babies with a strong immune foundation (Guxens et al. 880-881). Furthermore, this same source also states that this colostrum is rich in antibodies, providing babies with a significant boost early in their lives (Guxens et al. 881). This source takes a more objective, quantitative methodology that focuses on the elucidation of correlations between results when it comes to different chemicals.

Digestive Health

More broadly, breastfeeding is important because it can be easily digested by babies. This might not seem important at first glance, but it can ensure health on a level that simply would not have been possible otherwise. Namely, breast milk can reduce the risk of issues such as diarrhea in infants (Kornides and Kitsantas 264-265). The source used from Kornides utilizes a more qualitative methodology to closely examine the ways that this digestive health can be ensured,

such as through the promotion of beneficial bacteria within the baby's gut, which helps with digestion as well (Kornides and Kitsantas 264-265).

What makes these aforementioned foundations so important is that they present longer-term health implications for these babies, whether those be positive or negative. Looking at it from this perspective, breastfeeding is important because it ensures that numerous long-term health benefits can be accomplished even through a fairly short stint of breastfeeding. The results speak for themselves. Namely, through breastfeeding, mothers can drastically reduce the risk of gastrointestinal infections, thereby reducing the risk of serious digestive issues easily (Kornides and Kitsantas 264-265).

These sorts of digestive benefits tend to be much greater than the sum of their parts because of the ways that babies tend to be quite sensitive to changes in diet. Breastfeeding provides a way for mothers to ensure that their digestive habits remain the same, assuming the mother herself does not deem any changes necessary. On the other hand, if the mother feels that her child is not receiving the nutrition they need, she can easily make dietary changes herself that will then manifest in her breast milk.

Cognitive Benefits

Another reason why breastfeeding is important is that it provides numerous cognitive benefits for babies. As was the case with digestive and immune health, cognitive development takes place at an extremely quick pace in babies, making the provision of these sorts of frameworks through breastfeeding even more important. Numerous chemicals and vitamins can be found within breast milk that greatly assist with neurological development within these babies (Kornides and Kitsantas 266-267).

In this regard, there are countless benefits, psychologically, that can be easily observed through breastfeeding, meaning that its importance tends to be much greater than the sum of its parts. As cited Anatolitou more closely examines these correlations, stating that human breast milk can encourage development on multiple levels simultaneously (Anatolitou 12-13). This article is unlike many of the others because it takes a more qualitative look at these elements of breastfeeding, finding interesting results.

Psychologically, breastfeeding is important because it enables the baby and mother to bond more easily as well. This is another benefit that is oftentimes downplayed, but it is nonetheless important for many reasons. For one thing, proper psychological development is important for the mother as well, meaning that the mother benefits significantly from breastfeeding, even if it might not seem like it. In taking this approach, the mother can more aptly care for their child.

Allergies

Breastfeeding can have subtle benefits as well. There are many ways that breastfeeding can reduce the risk of allergic reactions and allergies in general in children. Much of this can be attributed to the aforementioned antibodies and other elements in breast milk that can protect them from allergic reactions. However, other benefits warrant further elucidation as well. For one thing, breastfeeding ensures that there is a significantly decreased risk of the development of various food allergies and other issues (Anatolitou 12-13).

In taking a qualitative look at these issues one can elucidate some of the mechanisms that enable this to easily take place. Lodge et al. utilizes a meta-analysis to examine the ways that breastfeeding plays a role in the development of asthma and allergies (Lodge et al. 38-40). More

specifically, this source finds that there is a strong negative correlation between breastfeeding and longer-term and more severe asthma and allergies (Lodge et al. 38-40). This makes it all the more clear that there are obvious benefits, even just within the purview of allergies, of breastfeeding.

Additionally, food allergies in particular see significant declines in terms of risk when the baby is properly breastfed (Lodge et al. 38-40). These food allergies are a major hurdle, especially during the crucial early stages of development for a baby, because of how these issues can easily persist into adolescence. As was mentioned before, these formative years are some of the most important, ensuring babies can build the proper defenses.

Chronic Disease

More broadly speaking, breastfeeding is important because it presents numerous additional ways for babies to be able to lower their risk of chronic illness, especially later in life. Namely, breastfeeding can make them much less susceptible to issues such as cancer, obesity, diabetes, and many other diseases. As a result, this benefit alone should demonstrate just how and why breastfeeding is so important. These chronic diseases, collectively, can create a snowball effect, adversely impacting these children more and more until it is too late for any sort of simple solution.

There are many other theories surrounding benefits of breastfeeding in terms of chronic disease prevention. although these are not as clearly researched. Mothers can physically benefit from breastfeeding. One common theory is that breastfeeding mothers are at decreased risk of ovarian cancer and recover more quickly from childbirth as well, among other benefits (Lodge et

al. 38-40). This makes it clear that many unexplored health benefits of breastfeeding must be more closely examined.

Emotional Benefits

The emotional benefits of breastfeeding were mentioned earlier, but bear particular emphasis because of the numerous ways that they benefit both the child and mother. For one thing, there is a sense of physical closeness that is naturally a part of the breastfeeding process, and this enables skin-to-skin contact. This sort of contact is well-documented as a major catalyst for the bonding process between mother and baby. This deepens their emotional bonds, causing the mother to be more responsible and attentive, which is an emotional benefit for baby and mother alike.

These processes, however, are subtle, and since the benefits are subtle and at times invisible, many do not believe that these benefits of breastfeeding warrant more concrete attention. Nevertheless, these benefits are salient because they can increase the amount of attention that the mother gives not just her first child, but any others that she chooses to have. The formulation of bonding exercises is considered to be so crucial for the long term construction of the family unit. Of course, this means that the breastfeeding process can also foster feelings of love and attachment, not just within the mother, but the baby as well.

The benefits of these emotional changes are twofold. First, they make the mother think about her child more frequently, increasing attentiveness. However, the other key benefit here is that the child thinks about the mother more often, thereby providing additional ways for the bond between mother and child to be able to be deepened in different ways. These sorts of benefits

also enable further emotional benefits to be gleaned because they represent both mother and baby opening up to one another.

The Socio-Economic Importance of Breastfeeding

In addition to the above importance of breastfeeding, another critical importance of breastfeeding is the socio-economic benefits to the individual's families and society. To begin with, breastfeeding helps reduce healthcare costs. Breast milk has several nutrients that help the baby fight infections in the body. The reduction in illness occurrences among children leads to minimal visitation in hospitals (El-Loly 10). Thus, the minimal visits to the hospitals lead to minimal hospital costs for the families and the healthcare system. In addition, the breastfeeding process is associated with minimal chronic health conditions, such as a reduction in cases of obesity in infants and certain types of cancer among mothers.

Another socio-economic importance of breastfeeding is increased workforce productivity. Breastfeeding mothers, when offered the opportunity to bond with their babies, have increased positive moods and energy that help them contribute positively within working hours. Thus, accommodating breastfeeding mothers' employees to breastfeed their mothers in the early months will minimize cases of absenteeism, thereby increasing productivity within the company. Another socio-economic advantage of breastfeeding is improved child development.

Breastfeeding is related to better cognitive development and better educational attainment in children, and advocating for mothers to keep breastfeeding their babies contributes to the development of human capital by offering a more skilled and productive workforce in the future that can contribute positively to society. Furthermore, breastfeeding minimizes cases of health disparities. It aids in mitigating the existing health inequalities by offering all infants the

nutrition they need, regardless of their background. So, breastfeeding promotes equality among all infants by providing them with essential nutrients for their growth. Overall, breastfeeding offers several socio-economic benefits by minimizing the cost of care, supporting workforce productivity, and fostering human capital growth.

The Environmental Importance of Breastfeeding

Environmental sustainability is another important aspect of breastfeeding. The critical ecological importance of breastfeeding lies in its minimal footprints as compared to formula feeding. Breastfeeding does not require manufacturing or packaging; by avoiding this, breastfeeding helps minimize carbon emissions that are associated with the production of formula milk. In comparison to formula milk, breastfeeding does not pollute the environment, thus promoting sustainable practices that do not interfere with the environment in any way (Andresen *et al.* 6397). By primarily relying on breastfeeding babies, indirectly, breastfeeding leads to sustainability and conservation of the environment.

Additionally, breastfeeding leads to no waste generation. Breast milk is obtained from the mother for the child without requiring any packing material, minimizing the incidence of waste generation such as formula milk. It leads to high protection of the ecosystem through minimizing the demand for formula milk. Lastly, breastfeeding aligns with the set practices of sustainability through the promotion of renewable natural feeding practices that support the well-being of the whole society. Through encouraging all mothers to breastfeed, a culture of sustainability will be achieved, thereby leading to a better environment. In terms of the environment, breastfeeding plays an essential role in promoting environmental sustainability through reducing carbon emissions, minimizing the production of waste materials, and boosting sustainable practices.

Economic Benefits

Next, it is important to consider some of the ways that breastfeeding is economically beneficial for mothers. Considering the current macroeconomic climate, any instance of increased value is important indeed. For one thing, as alluded to earlier, breastfeeding is a much cheaper option, collectively, than relying on baby formula, which has become infamous for being extremely expensive, especially in the wake of COVID-19. These sorts of benefits enable breastfeeding to consistently be important.

Additionally, breastfeeding provides a way for the baby and mother to both be able to gradually heal, especially psychologically, and this can replace specific forms of therapy, among other things. This serves to increase the economic value of breastfeeding in a way that ensures long-term benefits. These economic benefits are bolstered even more when considering just how friendly for the environment breastfeeding is. Indeed, it is clear that breastfeeding does not require plastic bottles or anything of the sort unless the mother wants to store her milk for later.

Generally speaking, breastfeeding requires very little in terms of environmental waste, and this increases its economic and environmental value significantly. Looking at it from this perspective, breastfeeding is important because it enables these environmental benefits to be able to be realized more easily, providing mothers with an increased level of autonomy in their own lives and their bodies. These environmental benefits ensure that breastfeeding functions as intended, and that it is consistently encouraged.

Social Benefits

One of the more controversial elements of breastfeeding is due to the common social taboo on nudity. Namely, there are many social stigmas against women going shirtless in public,

though "freeing the nipple" and normalizing being topless in public regardless of sex has also seen vocal proponents in recent years. For the most part, breastfeeding is viewed as a different part of the social narrative. Acceptance of breastfeeding is important for fostering self-confidence and ensuring that the practice is respected. On a broader level, breastfeeding is important because it serves as something of a litmus test, demonstrating the ways that society accepts certain practices, but not others. As a result, breastfeeding tends to be much more important, socially, then the sum of its parts, and this creates some startling implications.

Breastfeeding is oftentimes not accepted because of the element of nudity, and this cements breastfeeding as an effective litmus test for these social elements of society, whether they be positive or negative. By taking this approach, it becomes more and more possible to understand some of these innate implications of breastfeeding, even if they might not be positive. Socially, breastfeeding also enables the layman to understand the ways that natural practices such as this are considered.

More specifically, if an objectively superior alternative to breastfeeding were to emerge, would breastfeeding still be practiced, socially? This is an interesting question that alludes to the somewhat challenging nature of these social components surrounding breastfeeding. When examining them from this perspective, it is also important to understand more intrinsic concepts like empathy and awareness. For many, breastfeeding has become a feminist issue, which solidifies the importance of these social elements.

Postpartum Health Benefits

Numerous postpartum health benefits can be easily observed in breastfeeding. For one thing, breastfeeding is important because it can aid in uterine contractions, meaning that it helps

the uterus of the mother to be able to return to its size before she had the baby in the first place (Brahm and Valdes 15-16). Subsequently, breastfeeding can easily contribute to weight loss because of the calories that are consistently and efficiently burned by breastfeeding (Brahm and Valdes 15-16).

These postpartum health benefits are oftentimes ignored but are no less important. Indeed, breastfeeding provides clear ways for babies to be able to improve the health of their mothers, yet it is only fairly recently that there has been a significant amount of research that validates these sorts of viewpoints. This same source utilizes a qualitative methodology to be able to outline some of these benefits, such as the ways that it can create a more suitable and supportive environment (Brahm and Valdes 15-16).

Postpartum Recovery and Bonding

Postpartum is a significant mental health illness that affects women who have given birth recently. It is linked with persistent bad moods for the mothers, which are significantly accompanied by feelings of hopelessness and worthlessness. To curb the above condition, breastfeeding is associated with fewer postpartum depression incidences, and it promotes mother-to-child bonding. Women who breastfeed their infants offer protective ways against postpartum depression and postnatal and perinatal depression. Breastfeeding provides a protective factor to reduce postpartum stress after giving birth. More frequently, hormonal impacts associated with lactation are essential in protecting women from mental health issues. Such hormones offer the anxiolytic and antidepressant effects of prolactin and oxytocin (Prentice 29). Breastfeeding is associated with attenuated neuroendocrine anxiety responses, preventing the mother's psychological health. Lactation improves the mother's emotional involvement and

enhances mother-to-child interaction and bonding. Generally, breastfeeding is linked to the well-being of women. It reduces incidences of postpartum depression by strengthening the feeling of protection and safety for both the mother and the child.

Also, breastfeeding influences the bonding between a mother and a child, promoting a healthier parent and child. The above develops a bidirectional connection, reducing cessation rates during breastfeeding. The attachment to lactation underscores the importance of considering its positive mental health benefits. Psychologically, lactation enhances bonding through skin-to-skin touch, active talking, and eye contact between the infant and the mother. It helps mothers create more muscular attachments with their infants, promoting maternal sensitivity and reducing negative moods and postpartum depression. The bonding does not only benefit the mother but also indirectly affects the infant's mental health. The analgesic properties of breast milk and salivary cortisol due to skin-to-skin contact alleviate distress and strengthen bonding (Prentice 30). The bio-psychological impacts of breastfeeding bonding include stress reduction, pain reduction, and healthy infant development. The above is coupled with increased mother-to-child attachments and bonding, which are essential in protecting the infant against internalizing behaviors.

Protection against Breast and Ovarian Cancer

Breastfeeding helps lower the risk of women contracting breast and ovarian cancer.

During breastfeeding, women shed a lot of breast tissue, which helps remove dead cells with a possibility of DNA damage. The above action prevents the development of breast cancer. The reduction of the risk of breast cancer is associated with age, where women who have babies at a young age are most likely to have lower risks. In addition, breastfeeding reduces the chances of

developing ovarian cancer. Lactation prevents ovulation, which lowers the risk of ovarian cancer. Breastfeeding women experience hormonal changes that delay their menstrual period. It decreases the exposure to hormones associated with ovarian cancer (Prentice, 38). The above is because the fewer ovulation occurrences in a woman, the lower the exposure to abnormal cells and estrogen that could grow into cancer. Women who are diagnosed with ovarian cancer are likely to report that they have never breastfed.

Psychological Well-being

Breastfeeding results in the development of better psychological well-being by offering a source of soothing and comfort during periods of stress. When breastfed, infants experience physical warmth, nourishment, and closeness that helps reduce anxiety and stress. Breastfeeding attitude, intention, subjective norm, and behavioral control are the main factors in breastfeeding duration and initiation (Prentice 35). Breastfeeding reduces the occurrence of mental disorders such as anxiety, stress, and depression, which have a negative impact on the physiological functions of the body. In addition, breastfeeding reduces the occurrence of guilt and postpartum psychological disorders. Generally, breastfeeding is a psychological health phenomenon.

Avoiding Negative Health Issues

Although there are numerous positive reasons why breastfeeding is important, another reason is that it enables negative health problems to be able to be avoided that much more easily. For instance, as this same source points out, breastfeeding can prevent issues such as mouth breathing, malocclusion, and tooth decay, among others (Brahm and Valdes 15-16). These sorts

of benefits are important because of the ways that they can engender longer-term health benefits for the baby well into adolescence.

Although it is disturbing to think about, sudden infant death syndrome (SIDS) is a major threat for all mothers, yet breastfeeding can greatly aid in this regard as well. Brahm and Valdes state that "Lactation can decrease the risk of sudden infant death syndrome by 36% and prevent 13% of infant mortality worldwide. Breastfeeding results in direct savings on the use of infant formulas and bottles, as well as indirectly on associated health costs…" (Brahm and Valdes 15). What this means then is that lactation can provide the catalyst for many types of infant health areas that will ensure security for them.

Many other health issues can be avoided through breastfeeding, making it even more important. For instance, Schwartz and Nothnagle utilize a quantitative objective methodology to demonstrate that mothers who do not breastfeed have a significantly higher chance of breast cancer (Schwartz and Nothnagle 602-604). This is a well-researched issue, meaning that these correlations are all but solidified at this point. However, many choose not to breastfeed for their health reasons.

For them, it should be easy to direct them to articles that outline the host of health issues that can be avoided through breastfeeding. For instance, ovarian cancer risk is decreased significantly as a result of breastfeeding (Schwartz and Nothnagle 602-604). Other less common issues, such as hyperlipidemia and myocardial infarction, are also able to be mitigated through breastfeeding (Schwartz and Nothnagle 602-604). This is why many have argued that breastfeeding is just as important from the perspective of health for the mother as for the child, although there are many other elements relating to this issue. For instance, mothers who

breastfeed will see decreases in obesity risk but these benefits can oftentimes take time to develop (Schwartz and Nothnagle 602-604).

Death Prevention

Many have decried breastfeeding as being ineffective, even in the face of mounting evidence of its overall effectiveness at preventing a host of diseases and other issues. Namely, Prentice implements a qualitative methodology to examine the ways that breastfeeding can drastically reduce the chance of death in both the mother and baby, albeit for different reasons (Prentice 29-31). The source also implements more of a quantitative methodology when it comes to the analysis of the data itself, providing an effective mixed-methods approach here.

More specifically, the source gathers a large amount of data and uses it to draw different conclusions. The source states that "Feeding these data into the Lives Saved Tool suggests that these benefits could prevent 823,000 deaths in children and 22,000 among women" (Prentice 29). Breastfeeding is important because of the ways that it enables women to be able to more easily prevent these disasters in the first place, not only increasing the level of control over their lives but their babies as well.

Preventing death is never going to be an exact science. Rather, it is simply a numbers game that requires these mothers to be able to respond to different threats as they arise, with breastfeeding being but one of many tools available to them to achieve this end. Nevertheless, breastfeeding can drastically lessen the risk of many of these issues that can frequently lead to death, such as diabetes and many other issues. If there is one reason why breastfeeding is important, it is that these issues tend to be much more important than the sum of their parts, creating an obvious need for change.

Lasting Effects

When examining the importance of breastfeeding, there are numerous long-term, potentially lifelong, impacts that can be easily observed. These ensure that breastfeeding remains relevant, even in the face of scientific advancement that might or might not claim that breastfeeding is outdated in some regard. Victor et al. implements a mixed-methods approach to examine these lasting effects from a multi-year perspective. In doing so, the authors found that the benefits of weight and diabetes were the most salient in the long run (Victora et al. 475). This article implements a literature review methodology to be able to provide a quantitative and qualitative analysis of these elements.

This enabled the source to be much greater than the sum of its parts, especially when it comes to examining the macro impacts of breastfeeding. This provides a clear niche for the methodology of this source to be able to exploit and examine. More specifically, the source states that scaling breastfeeding up to a universal level would enable a much more retrospective understanding of these different health benefits, enabling them to be able to be leveraged in the long run (Victora et al. 475).

Another lifelong benefit is more abstract. Namely, the children of mothers who breastfeed are more intelligent, and this can manifest in many different ways as well (Victora et al. 475). These sorts of benefits provide insight into some of the more effective long-term benefits of breastfeeding. Although the psychological benefits of breastfeeding have already been closely examined, the lifelong nature of intelligence demonstrates that these psychological benefits are indeed extremely important.

Childhood Development

Another purview of breastfeeding that emphasizes its importance is childhood development. Now, it could be argued that each of the aforementioned areas, in itself, relates to childhood development in some way, but some specific benefits within this field must be more closely examined to ensure that breastfeeding is fully understood. To that end, Belfield implements a qualitative methodology to examine not just previous literature on this subject, but also concrete information relating to breastfeeding. This enables a much more retrospective examination of childhood development and the underlying ways that breastfeeding can engender it in the long run.

This source focuses on observable, physical improvements that are possible through breastfeeding. The author states, "Our results indicate that breastfeeding and not formula-feeding at birth are associated with increased probabilities of being in excellent health at 9 months.

Furthermore, they are protective against obesity and improve cognitive outcomes at 24 months and 54 months" (Belfield 2). Then, breastfeeding provides not just immediate benefits, but long-term wellness too.

This is important because it ensures that mothers have a greater amount of autonomy when it comes to the methodologies that they choose to employ. For instance, a mother might choose to favor a longer-term approach to the health of her child than one who might simply prefer to offer the necessary nutrition to them at that moment. This difference in philosophies also explains the prevalence of baby formula and similar approaches. Although no one solution is universally correct, breastfeeding provides an additional outlet or option that can be leveraged should the mother deem it necessary. Childhood development is the natural consequence of these measures ensuring long-term health.

Meeting Goals

Breastfeeding is also important because mothers can be able to set up and meet various goals that, collectively, can greatly aid their children in different ways. Another source implements a longitudinal prospective design to assess the link between breastfeeding behavior and cognitive development in children (Krol 977). The source also examines numerous other longitudinal studies to measure cognitive development in children showing the ways that breastfeeding enables results to be met.

These goals and subsequent results from them can take many forms, yet in each case, there is always an element of subjectivity, and this is why the flexibility of breastfeeding is so important to this end. Indeed, breastfeeding provides a clear means for mothers to be able to take more health-centric approaches that will ensure that various health goals will be able to be met efficiently and safely. For instance, a mother might choose to use breastfeeding initially to provide intellectual benefits, but switch to formula later because of concerns about her diet having an impact on the breast milk.

In each of these cases, flexibility is important, and this is why breastfeeding exists as an option in the first place. As is the case with many of these health-oriented concepts, the meeting of goals that have been set up for specific health reasons is crucially important, making breastfeeding similarly important. McCrory and Murray state that breastfeeding provides chemicals that aid in neurological development (McCrory and Murray 1680). The source implements a quantitative methodology to examine these different chemicals and the impacts that they have on childhood development (McCrory and Murray 1680). As such, there are many ways that breastfeeding can enable these goals to be met.

Academic Achievement

One of the last reasons why breastfeeding is so important is because it can easily lead to academic achievement in children, even later on in their lives. More specifically, Oddy et al. implements a quantitative methodology to state that at ten years of age, children were performing markedly better academically when they were breastfed at six months of age (Oddy et al. 137-138). This demonstrates that within contemporary society, there is a clear place for breastfeeding because of the importance of academic achievement.

Furthermore, academic achievement provides clear ways for these children to succeed potentially leading to more and more of them breastfeeding once they have children of their own. This creates an interesting snowball effect that demonstrates the long-term importance academically of breastfeeding. This source also states that breastfeeding enables mothers to facilitate maternal verbal sensitivity ability by emphasizing breastfeeding as well (Oddy et al. 137-138). This enunciates the importance of breastfeeding because of the ways that it can enable numerous facets of development simultaneously.

Fostering academic achievement is a major accomplishment from a relatively minor act like breastfeeding, and even if the correlations might not be entirely concrete, the obvious correlations that have been able to be observed are concrete enough to make it clear that breastfeeding is indeed important. This will enable breastfeeding to be used as a clear foundation for future development. Indeed, mothers who engage in breastfeeding are also more likely to care for their children in other ways (Oddy et al. 137-138).

Conclusion

Ultimately, it has been made clear that breastfeeding is indeed extremely important, and each of these sources provides a different reason for just how and why this is the case. In short, breastfeeding provides ways for mothers to drastically improve the mental and physical health of their children extremely easily, at least compared to the difficulty of doing so later in their lives. This makes breastfeeding much more impactful than the sum of its parts, ensuring that it should continue to be considered in the future as well. The academic benefits and correlations associated with breastfeeding in particular serve as a salient reason for continued implementation. Even though there are some challenges associated with it, especially for mothers who experience challenges acquiring proper nutrition, the benefits more than outweigh the costs. This provides a clear foundation for breastfeeding, especially when compared to long-term use of baby formula which has not been met with as much success.

Bibliography

- Anatolitou, Fani. "Human Milk Benefits and Breastfeeding." *Journal of Pediatric and Neonatal Individualized Medicine (JPNIM)* vol.1, no.1, 2012.
- Belderbos, M. E., et al. "Breastfeeding Modulates Neonatal Innate Immune Responses: A Prospective Birth Cohort Study." *Pediatric Allergy and Immunology* vol.23, no.1, 2012.
- Belfield, Clive R., and Inas Rashad Kelly. "The Benefits of Breast Feeding Across the Early Years of Childhood." *Journal of Human Capital* vol.6, no.3, 2012.
- Binns, Colin, MiKyung Lee, and Wah Yun Low. "The Long-Term Public Health Benefits of Breastfeeding." *Asia Pacific Journal of Public Health* vol.28, no.1, 2016.
- Brahm, Paulina, and Veronica Valdes. "Benefits of Breastfeeding and Risks Associated With Not Breastfeeding." *Rev Chil Pediatr* vol.88, no.1, 2017.
- Guxens, Mònica, et al. "Breastfeeding, Long-Chain Polyunsaturated Fatty Acids in Colostrum, and Infant Mental Development." *Pediatrics* vol.128, no.4, 2011.
- Kornides, Melanie, and Panagiota Kitsantas. "Evaluation of Breastfeeding Promotion, Support, and Knowledge of Benefits on Breastfeeding Outcomes." *Journal of Child Health Care* vol.17, no.3, 2013.
- Krol, Kathleen M., and Tobias Grossmann. "Psychological Effects Of Breastfeeding on Children and Mothers." *Bundesgesundheitsblatt, Gesundheitsforschung,*Gesundheitsschutz vol.61, no.8, 2018.
- Lodge, Caroline J., et al. "Breastfeeding and Asthma And Allergies: A Systematic Review and Meta–Analysis." *Acta Paediatrica* vol.104, 2015.

- McCrory, Cathal, and Aisling Murray. "The Effect Of Breastfeeding on Neuro-Development in Infancy." *Maternal and Child Health Journal* vol.17, 2013.
- Oddy, Wendy H., et al. "Breastfeeding Duration and Academic Achievement at 10 Years." *Pediatrics* vol.127, no.1, 2011.
- Prentice, Andrew M. "Breastfeeding in the Modern World." *Annals of Nutrition and Metabolism* vol.78. no. 2, 2022.
- Schwarz, Eleanor B., and Melissa Nothnagle. "The Maternal Health Benefits of Breastfeeding." *American Family Physician* vol.91, no.9, 2015.
- Victora, Cesar G., et al. "Breastfeeding in the 21st Century: Epidemiology, Mechanisms, and Lifelong Effect." *The Lancet* vol.387 no.10017, 2016
- Ahmed, Essia R., Rahim, Noor, Alabdullah, Tariq, and Thottoli, Mohammed. "An examination of social media role in entrepreneurial intention among accounting students: a SEM study." *Journal of Modern Accounting and Auditing*, Vol. 15, No. 12, 2019, pp. 577-589.
- Arora, Anuja, et al. "Measuring social media influencer index- insights from Facebook, Twitter and Instagram." *Journal of Retailing and Consumer Services*, 2019, 12-24.
- Becker, Genevieve E. "Measuring Mothers' Viewpoints of Breast Pump Usage." *International Journal of Environmental Research and Public Health* vol. 18, no. 8, 2021, p. 3883.
- Bridges, Nicole et al. Exploring breastfeeding support on social media. *International Breastfeeding Journal*, vol 13, no, (2018), p. 22-29.

- Changchit, Chuleeporn, et al. "Determinants of online shopping influencing Thai consumer's buying choices." *Journal of Internet Commerce* vol. 18, 2019, p. 1–23.
- Crossland, Nicola, et al. "Breast pumps as an incentive for breastfeeding: a mixed methods study of acceptability." *Maternal & Child Nutrition* vol. 12,4 (2016): 726-39.
- Dodoo, Na and Wu, Linwan. "Exploring the anteceding impact of personalized social media advertising on online impulse buying tendency." *International Journal of Internet Marketing and Advertising*, vol 13, no. 1, 2019, pp. 73–95.
- Hastings, G., Angus, K., Eadie, D. et al. Selling second best: how infant formula marketing works. *Global Health* vol 16, no. 1, 2020, p. 77.
- Lyons, Katríona E et al. "Breast Milk, a Source of Beneficial Microbes and Associated Benefits for Infant Health." *Nutrients* vol. 12,4 1039. 9 Apr. 2020.
- McInnes, Rhona J et al. "Women's views about a free breast pump service: Online survey informing intervention development." *Maternal & Child Nutrition* vol. 15, vol. 2 (2019), e12745.
- Pellegrino, Alfonso, et al. "The Dark Side of Social Media: Content Effects on the Relationship Between Materialism and Consumption Behaviors." *Frontiers in Psychology* vol. 13 870614. 28 Apr. 2022.
- Sheehan, Athena, and Wendy L Bowcher. "Messages to new mothers: an analysis of breast pump advertisements." *Maternal & Child Nutrition* vol. 13,2 (2017): e12313.
- Yourkavitch, Jennifer, and Paige Hall Smith. "Women's status, breastfeeding support, and breastfeeding practices in the United States." *PloS One* vol. 17, no. 9, 2022, e0275021.

- Andresen, Ellen Cecilie, et al. "Environmental impact of feeding with infant formula in comparison with breastfeeding." International journal of environmental research and public health 19.11 (2022): 6397.
- El-Loly, Mohamed Mansour. "Colostrum ingredients, its nutritional and health benefits-an overview." *Clinical Nutrition Open Science* (2022).

Prentice, Andrew M. "Breastfeeding in the modern world." *Annals of Nutrition and Metabolism* 78.Suppl. 2 (2022): 29-38.

- Medical and Healthcare products. Facebook. (2023, December 5). https://www.facebook.com/policies_center/commerce medical_and_healthcare_products
- Tomori, Cecília, et al. "When separation is not the answer: Breastfeeding mothers and infants affected by COVID-19." *Maternal & Child Nutrition* 16.4 (2020): e13033.
- Digital marketing of formula and baby food negatively influences breast feeding and
 complementary feeding: a cross-sectional study and video recording of parental
 exposure in Mexico. (n.d.). https://www.ncbi.nlm.nih.gov/pmc/articles/
 PMC9594510/.
- Marcon AR, Bieber M, Azad MB. Protecting, promoting, and supporting breastfeeding on Instagram. Matern Child Nutr. 2019 Jan;15(1):e12658. doi: 10.1111/mcn.12658. Epub 2018 Aug 5. PMID: 30079555; PMCID: PMC7198963.

Ching, C., Zambrano, P., Nguyen, T. T., Tharaney, M., Zafimanjaka, M. G., &

Mathisen, R. (2021). Old Tricks, New Opportunities: How Companies Violate

the International Code of Marketing of Breast-Milk Substitutes and

Undermine Maternal and Child Health during the COVID-19 Pandemic.

International Journal of Environmental Research and Public Health, 18(5), 2381.

https://doi.org/10.3390/ijerph18052381