Products List

as of January, 2015

Category	Product Name	Specs	Product Images
Breast Pumps	Electric Breast Pump Pro		
	Electric Breast Pump Portable		
	Manual Breast Pump		
	Hand Expression Cup		
Nursing Bottles for Infants	SofTouch™ Peristaltic PLUS Series Nipple for Hospital Use	SSS	
		SS	
	SofTouch™ Peristaltic PLUS Series Nursing Bottle for Hospital Use	100ml	
		200ml	
	Cap for Nursing Bottle for Hospital Use		
	Name Plate for Nursing Bottle for Hospital Use		
Nursing Bottles for Infants with cleft lip and palate	Bottle for Cleft Lip and Palate	240ml	
	Nipple for Cleft Lip and Palate	Small	
		Regular	
	Feeder with Long Silicone Nipple	120ml	
Breast Milk Storage Accessories	Breastmilk Storage Bags		
	Breastmilk Storage Bottles	Wide-neck	
		Slim-neck	
	Bottle & Babyfood Warmer	Power input : AC220V, 50-60Hz Plug type : G or E	
Nipple Care Items	Nipple Care Cream		
	Nipple Shield	Soft type (M size/L size)	
		Hard type	
	Nipple Puller		
	Breast Pads Honeycomb	36pcs	
		60pcs	

PIGEON
PIGEON CORPORATION, Tokyo, Japan
4-4, Nihonbashi Hisamatsu-cho, Chuo-ku, Tokyo 103-8480, Japan
http://www.pigeon.com/

Dedicated to the Benefits of Breast Milk

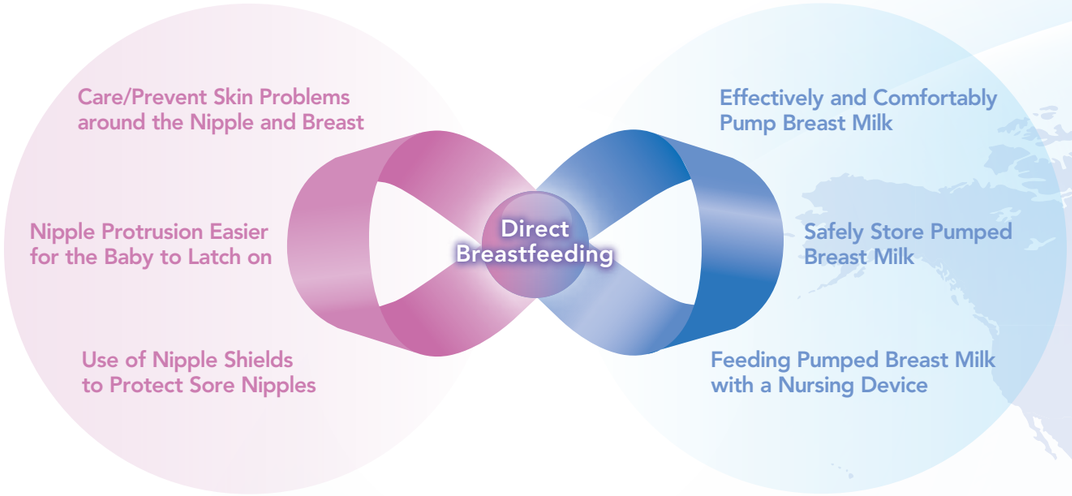
pigeon

PIGEON ai

Product Guide
For Pediatric and Maternity Hospitals

From the medical practice to households.

Pigeon covers all areas related to breastfeeding.

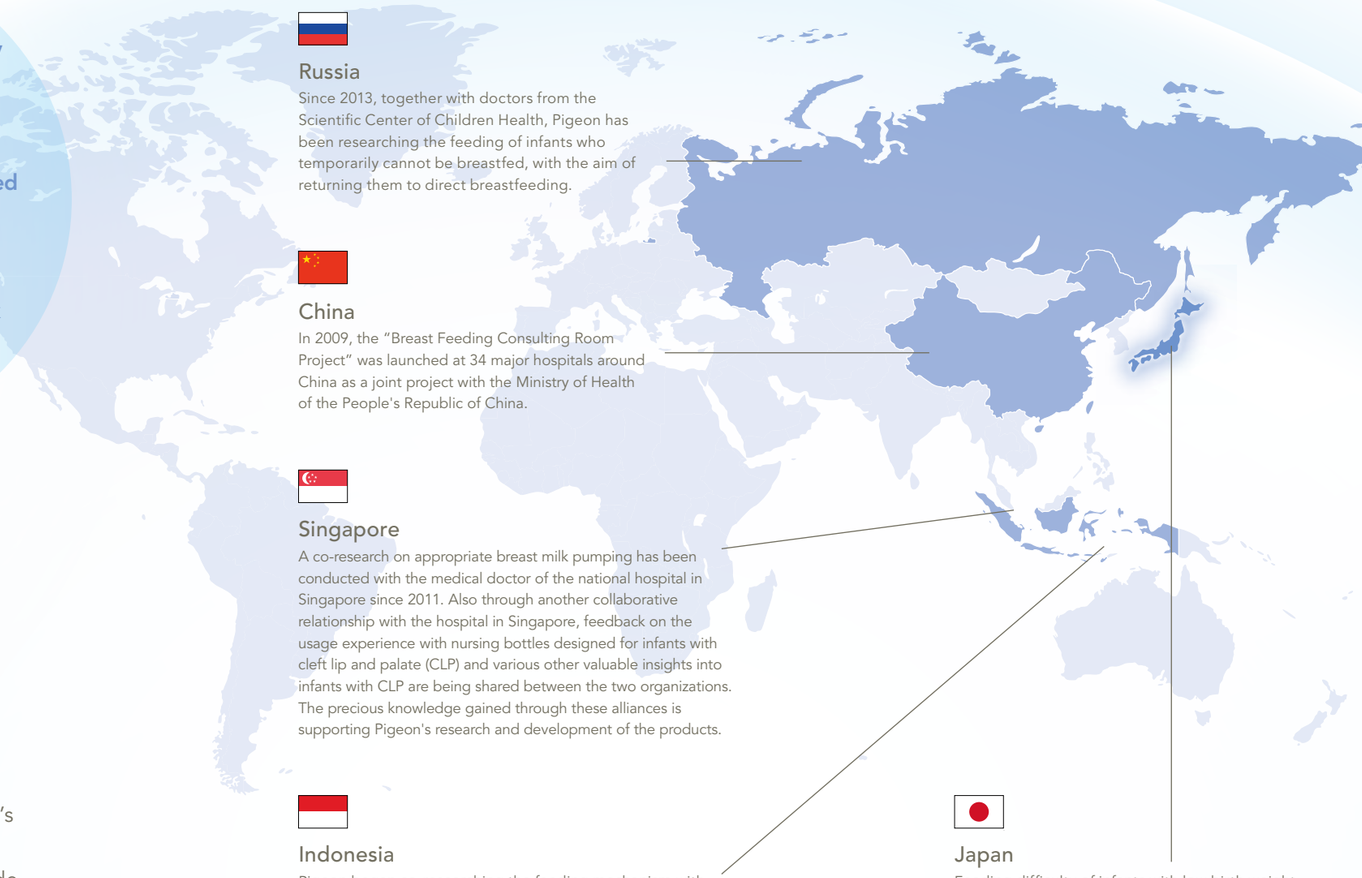


Pigeon's approach to breastfeeding

Breastfeeding not only provides infants with necessary nutrients, but it is an important activity that strengthens the bond between the mother and infant.
Pigeon believes that the ideal form of breastfeeding is when the infant feeds directly from the mother's nipple (direct breastfeeding), and we endeavor to support this.
When direct breastfeeding becomes difficult for any reason, Pigeon's products are designed to provide solutions that will enable mothers to return to this ideal form of breastfeeding. Our corporate philosophy is represented in our ribbon symbol.
The left side of the ribbon shows how Pigeon's products support a mother's return to direct breastfeeding when a problem occurs with the nipple or the breast. The right side of the ribbon expresses Pigeon's philosophy of supporting direct breastfeeding by providing the option to pump, store, and bottle-feed precious breast milk when the mother cannot breastfeed directly.

For mothers and infants the world over.

Pigeon's research activities are conducted in collaboration with healthcare professionals, government and academia.



Russia

Since 2013, together with doctors from the Scientific Center of Children Health, Pigeon has been researching the feeding of infants who temporarily cannot be breastfed, with the aim of returning them to direct breastfeeding.

China

In 2009, the "Breast Feeding Consulting Room Project" was launched at 34 major hospitals around China as a joint project with the Ministry of Health of the People's Republic of China.

Singapore

A co-research on appropriate breast milk pumping has been conducted with the medical doctor of the national hospital in Singapore since 2011. Also through another collaborative relationship with the hospital in Singapore, feedback on the usage experience with nursing bottles designed for infants with cleft lip and palate (CLP) and various other valuable insights into infants with CLP are being shared between the two organizations. The precious knowledge gained through these alliances is supporting Pigeon's research and development of the products.

Indonesia

Pigeon began co-researching the feeding mechanism with one of the famous medical doctor from the biggest national hospital in Indonesia in 2013, and the study of the feeding problems in NICU. Pigeon provided the information regarding infant sucking motion to facilitate imaging of the infant's tongue movements during feeding, and the data are being collected in the hospital in Indonesia. The two organizations visit hospitals in each other's country to develop further understanding and expertise, while exchanging information to design optimal products for the infants in NICU of Indonesia.

Japan

Feeding difficulty of infants with low birth weight (LBW) is jointly being researched by Pigeon and Dr. Hayashi of the Vice Director of Saitama Sekishinkai Hospital Pediatrics since 1992. The co-research of the infants with CLP has been conducted since 2008 with Dr. Tatsuno of Showa University School of Medicine Pediatrics to clarify the mechanism of sucking of the infants with CLP.

Thorough research of mothers' breasts and breast milk pumping mechanisms lead to the development of a comfortable and efficient breast pump.

Pigeon's view on breast pumps

When direct breastfeeding becomes difficult, with the use of a breast pump an infant can receive the essential nutrients found in breast milk. However, if pain or discomfort occurs during this process, the mother may become hesitant about using the breast pump, which can lead to problems such as a decline in milk production or shortening of the breastfeeding period.
The ideal breast pump experience Pigeon aims for is similar to what we are trying to achieve in direct breastfeeding support: pain-free and discomfort-free pumping that enables the mother to express sufficient milk volume each time. In order to provide such an experience, Pigeon focused on the three key factors in pumping breast milk.

The three key factors for developing breast pumps

1 Perfect Fit

If a breast pump does not fit the breast well, there's a risk of air leakage. This can cause discomfort to the mother. Improving breast pump fit helps prevent air leakage, allowing the mother to express milk comfortably.

2 Gentle Stimulation

Breast milk is secreted from the acinus cells, then flows through to the milk ducts. In this process, the let-down reflexes, generated by gentle stimulation, play the important roles to gather milk to the main duct which leads to the nipple.
By having this step before expression, it eases the burden on the mother and enables smooth expression.

3 Efficient Expression

Every mother has a preferred suction pressure and speed during expression.
To respond to these varying needs and to enable efficient milk expression, the suction pressure and speed of the breast pump should be freely adjustable.

Comments of Mothers

- When the baby sucks, it can be sometimes painful because he sucks strong, but with the preparation mode on the breast pump, even if my breasts are full, I can express milk smoothly without pain.
- There is a fit cover on the cup, so it doesn't come off easily, which is good.
- It's good how the expression time is displayed. Now I know how long it takes until let-down.

(Pigeon : New Electric Breast Pump FC Research Participants, September 2014)

Breast Pumps

Soft fit cover

The soft silicone wings (air-tight ring) improve fit to the breast, and helps prevent air-leakage which can interrupt suction.
*Regular and large sizes available.

Preparation mode

Gentle stimulation promotes the let-down reflex, which alleviates burden on the mother.

Suction pressure and suction speed freely adjustable during expression

Suction pressure and suction speed can be freely adjusted during expression.
This responds to the individual needs of mothers, and supports sufficient volume of expression over a short time.

Electric Breast Pump Pro

For mothers who want to accommodate their own pumping style, which increases comfort

- Customizable pumping style : 7 adjustable levels of suction pressure with 4 adjustable suction speeds to choose from
- LED monitor : Easy to use and view

Manual Breast Pump

For mothers who like simplicity and fuss-free pumps

- Ergonomic easy-express handle : Reduces hand fatigue for comfortable and easy pumping
- Quiet, compact and lightweight : For a discreet pumping experience
- Simple and easy : Fewer parts, which makes it easy to assemble, use and clean

Electric Breast Pump Portable

For mothers on the go

- Adjustable suction pressure : 6 adjustable levels of suction pressure
- Portable and compact : For easy pumping anytime, anywhere
- Simple and easy : Fewer parts, which makes it easy to assemble, use and clean

Hand Expression Cup

For manual expressing by hand

- Wide socket facilitates receiving milk into the bottle

Attachment Specifications

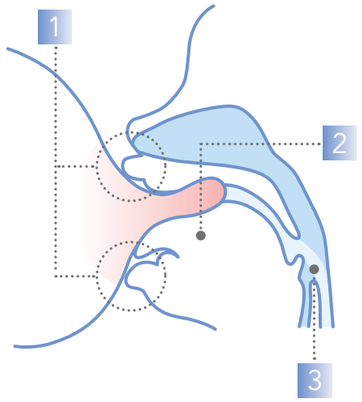
	Soft Fit Cover	Preparation Mode	Suction Pressure and Suction Speed Adjuster
Electric Breast Pump Pro	◎	◎ (2 adjustable suction speeds)	◎ (7 adjustable levels of suction pressure, 4 adjustable suction speeds)
Electric Breast Pump Portable	◎	○	○ (6 adjustable levels of suction pressure)
Manual Breast Pump	◎	○	○ (Manually adjusted)

Supporting breastfeeding around the world.
Pigeon's feeding devices for professional use are developed through research of the three key factors of sucking.

Pigeon's view on sucking

Infants who have difficulty with direct breastfeeding can continue to receive breast milk through the use of feeding devices such as bottle teats.
Through long-term research on sucking, Pigeon uncovered the "three key factors of sucking". We endeavor to develop products that enable the infant to latch-on, suck, and swallow just like during direct breastfeeding, facilitating a return to direct breastfeeding even after the use of bottle teats.
Pigeon also supports oral feeding of infants with low birth weight (LBW) who have premature breathing-swallowing coordination, and infants with cleft lip and palate (CLP) who find it difficult to latch-on to the mother's breast, by providing specially developed bottle teats.
Pigeon's nursing bottles are developed with the single-minded concept that "Our desire is to deliver the benefits of breastfeeding to all babies".

The three key factors of sucking



1 Attachment (Latch on)
When the infant latches on to the nipple, the mouth opens wide and the lips curl outwards. This enables a tight seal over the nipple and the areola, creating the negative pressure inside the oral cavity required for sucking.

2 Peristaltic Tongue Movement
The infant's tongue moves in a wave-like motion over the nipple to suck breast milk.
This is called peristaltic movement, and is derived from innate primary behaviors.

3 Swallowing
Infants swallow breast milk down to the esophagus, breathing at the same time as the tongue moves. Excessive milk burdens infants with swallowing difficulties, resulting in choking.

Comments of Specialists

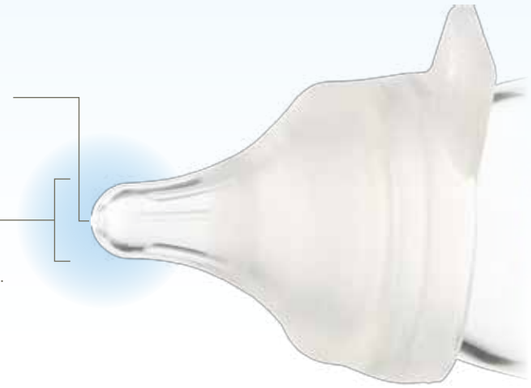
- Everyone should breastfeed for maximum benefit to the infant, but this is even more important for preemie babies.(Neonatologist, US)
- Preemies and NICU babies are hard to initiate on breastfeeding. It really takes a huge commitment. Bottles are easier.(Pediatrician, US)
- My patients aren't mature enough to have developed the sucking power necessary to breastfeed. Fortunately, there are preemie nipple attachments available to help with preterm babies. (Neonatologist, US)

(Pigeon : Research on Pediatricians, Lactation Consultants and Neonatologists in the US and Philippines Regarding Breastfeeding, 2014)

Nursing Bottles for Infants

A teat design that controls milk flow
The teat design prevents excessive milk from flowing into the infant's mouth, supporting controlled breathing and swallowing.

Small teat head
A size comfortable for infants with a small mouths.



Bottle teats for Infants with LBW

SofTouch™ Peristaltic PLUS Series / Nipple for Hospital Use

- Teat tip is small enough to be used for infants exhibiting difficulty latching on
- Can also be used for infants with very low birth weight
- Also available in SS size for general newborns

Sterilization Method : Boiling, Steam, Chemical, Autoclave
Material : Silicone rubber

Nursing Bottle for Hospital Use

- Specially designed for convenience and hygienic usage in the hospital
- The bottle comes without a screw cap or hood
- For use with the SofTouch™ Peristaltic PLUS SSS / SS nipple for infants with LBW and general newborns
- Available in 2 sizes - 100ml and 200ml

Sterilization Method :
Boiling, Steam, Chemical, Autoclave
Material : Borosilicate glass

Cap for Nursing Bottle for Hospital Use

Name Plate for Nursing Bottle for Hospital Use

Sterilization Method : Boiling, Steam, Chemical
Material : Polypropylene

Cleaning/sterilizing bottle teats and nursing bottles

Use mild detergent when washing. Method of sterilization differs according to material. For autoclaving (high pressure steam sterilization), follow the temperatures and times indicated below. The material durability will decline if sterilized using higher temperatures or for longer durations.

Material	Boiling	Autoclave	Chemical	Suggested replacement timing
Silicone rubber	○	○	○	Total time boiled : 24 hours Total time autoclaved : 20 hours
Borosilicate glass	○	○	○	
Polypropylene	○	×	○	
PPSU	○	×	○	

Pace of feeding

Time and volume of each feeding session differs according to individual, but the general pace of feeding for newborns to infants aged 1-2 months is indicated below. Please use the following information to select the appropriate teat for each baby to enable appropriately paced feeding.

Age	Milk volume	Pace	Feeding time
0 - 5 days	30 - 50ml	3 - 5ml/min	5 - 10min
5 days - 1 month	50 - 100ml	5 - 10ml/min	Approximately 10min
1 - 2 months	100 - 160ml	10 - 15ml/min	10 - 15min

*Autoclave sterilization temperature and time must be either 121~124°C for 15minutes, or 135°C for 3 minutes.
*Silicone rubber products should be replaced 2 months after first use.
*"Total time" in suggested replacement timing does not include time of the heat increase/decrease.
*Do not expose bottle teats under UV rays.

Nursing Bottles for Infants with Cleft Lip and Palate

2 nipple sizes
Choose small or regular size to suit the infants.

Nipple specially designed for infants with CLP
Neither air nor milk will pass through the cleft while sucking.

Backflow prevention valve
Place the valve inside the teat to prevent milk from flowing back into the bottle during feeding.
This enables the infant to suck milk easily by gently crushing the teat.

Soft, easy-to-hold bottle
A gentle squeeze of the bottle is enough to push milk into the infant's mouth.

For infants with CLP

Bottle and Nipple for Cleft Lip and Palate

- Specially designed for the proper feeding of infants with CLP or with poor sucking strength
- Y-cut nipple is thick on one side and thin on the other for easy sucking
- One-way valve prevents milk inside the nipple from flowing back into the bottle

Bottle available in 240ml
Accessories :
Soft silicone nipples – small size and regular size
Sterilization Methods : Boiling, Steam, Chemical
*Autoclave only for nipple
Material : Polypropylene

Nipples available in small and regular sizes
Sterilization Method :
Boiling, Steam, Chemical, Autoclave
Material : Silicone rubber

For post-surgery and micrognathia

Feeder with Long Silicone Nipple

- Specially designed for the proper feeding of infants with poor sucking strength or infants who have difficulty in closing the mouth to feed
- The flow rate during feeding can be adjusted using the squeezable bottle

Bottle available in 120ml
Sterilization Method : Boiling, Steam, Chemical
Material : Polypropylene

Long silicone nipple
Sterilization Method : Boiling, Steam, Chemical, Autoclave
Material : Silicone rubber

List of Feeding Devices

	SofTouch™ Peristaltic PLUS Nipple	SofTouch™ Peristaltic PLUS Nipple for Hospital Use	Bottle and Nipple for Cleft Lip and Palate	Feeder with Long Silicone Nipple
General newborns	○	○		
Infants with LBW		○		○
Infants with CLP			○	○

Supporting "breast milk any time". Pigeon's storage accessories.

Pigeon's view on breast milk storage

Hygienic breast milk storage is crucial, especially when the mother experiences nipple probrems, mother-infant separation or excess milk production.
The nutrients and immunity breast milk provides should always be available to infants. That's why Pigeon focuses on "quality storage."

Breast Milk Storage Accesories

Breastmilk Storage Bags

A design dedicated to hygiene

- For storage and freezing of expressed breast milk
- Pre-sterilized using gamma rays
- Comes with leak-proof double zipper seal
- Self-standing bag for ease of use
- Flat storage in freezer maximizes surface area, making it easier to thaw
- Cost effective – stores a large quantity of breast milk

Material : Food-grade polyethylene

Breastmilk Storage Bottles

No need to pour into a feeding bottle

- A convenient choice that permits expression of breast milk into the storage bottle followed by safe and secure refrigeration
- Available in 2 types – Wide-neck and Slim-neck

Sterilization Method :
Boiling, Steam, Chemical
Material :
Bottle / Cap – Polypropylene
Sealing disk* – TPE
* For Slim-neck

Bottle & Babyfood Warmer

To heat and keep warm breast milk and baby food

- Instant heating of breast milk and baby food
- Able to control heating temperature to ensure the milk or food never gets over-heated to avoid destroying the nutrients
- Easy to handle, wash and carry
- Fits all bottle size

Accessories : Heating cup, cover
Material : Heating cup / Cover /
Main body - Polypropylene
Heating plate - Aluminum
Power input : AC220V, 50-60Hz
Plug type : G or E

About storage of breast milk

When experiencing nipple problems, mother-infant separation, or excess milk production, breast milk storage is strongly recommended. To store breast milk hygienically, sterilization of the breast pump and storage bottles and careful control of storage temperature are crucial. Breast milk should be placed in the fridge or freezer immediately after pumping, in a location relatively unafected by the temperature change that occurs when opening and closing the fridge/freezer door. Pumped breast milk should be used as soon as possible when removed.

Storage limits of breast milk

	Refrigeration (Below 4°C)	Freezing (Approx.-18°C)
Freshly pumped milk	24 hours	3 Months (ideal), to 6 months (acceptable)
After defrosting (Thawing without heating)	24 hours	(Do not refreeze)

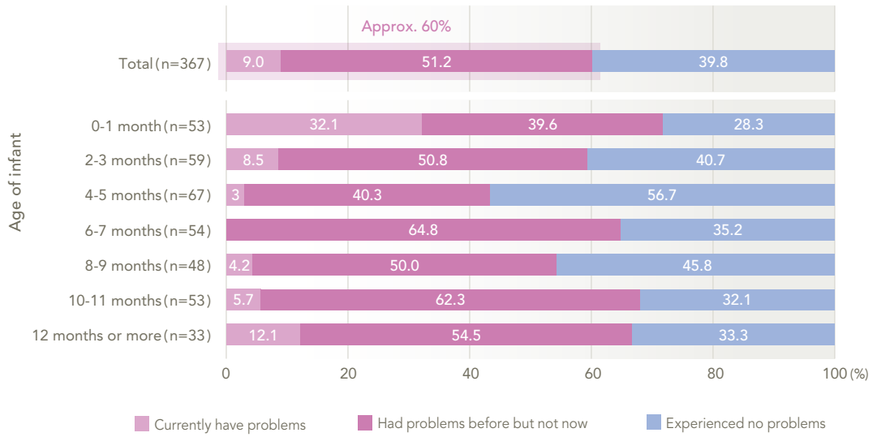
* Milk stored in the refrigerator/freezer should be gently warmed in water of approximately 40°C. It is best not to use boiling water or a microwave. Transfering the milk to another pot after the water becomes tepid will warm it up more quickly than letting it come to room temperature alone.

To enable mothers to continue breastfeeding, Pigeon protects the nipple area.

Pigeon's view on nipples/papilla

When problems such as cracked nipples or pain in the nipple occur, directly feeding from the mother's breast becomes difficult temporarily.
Pigeon researched mothers with infants in the age range of 0-12 months, and found that approximately 60% of mothers experienced problems related to the nipple. The most frequent problems were cracked nipples and pain, but nipple form abnormalities such as flat or inverted nipples were also observed frequently.
Pigeon provides products that can ease these temporal problems, to enable the mother to return to and continue direct breastfeeding.

Fig.1 Ratio of mothers experiencing or having experienced nipple problems (n=367)



Subjects : 367 mothers with infants between the age of 0-12 months
Method : Web survey
Surveyed Period : February, 2012

Reference :
Pigeon : Breastfeeding Research, 2012

Comments of Nurses

<Comments on the cream>
- Cracked nipples improved.
- No color or smell indicates that it is good for the body.
- It's good how it doesn't feel sticky when applied.

(Pigeon : Hospital Research Report about Nipple Care Cream, 2013*)
*The research was conducted using "Repair Nipple", the Japanese product name for Nipple Care Cream.

Nipple Care Items

Pigeon supports breastfeeding by helping mothers protect their nipples.

Nipple Care Cream

For the mother's nipple or the baby's skin

- Soothes, heals and protects dry, cracked skin
- Made of 100% ultra-pure lanolin
- Hypoallergenic
- Completely natural
- Fragrance-free and no additives

Net Weight : 50g
Ingredients : 100% ultra-pure grade, USP modified lanolin

Nipple Puller

Correct flat or inverted nipples for smoother breastfeeding

- Draws out flat or inverted nipples gently and painlessly
- Helps infant to latch on to ease engorgement naturally
- Easy to use and clean
- Comes with casing for ease of travel

Material : Case / shield - Polypropylene
Bulb - Silicone rubber

Nipple Shield

For mothers with inverted, flat, or cracked nipples, or for mothers struggling with pain during breastfeeding

- Made from a soft flexible silicone rubber that provides a wide contact surface
- To relieve pain caused by sore or cracked nipples when breastfeeding
- To solve severe or persistent latch-on problems caused by flat, inverted nipples
- Comes with a casing for ease of travel
- Available in 2 types – Soft and Hard
- Hard type is for nipples with severe sores, cracks and/or pain

Material : Case – Polypropylene
Nipple shield - Silicone rubber

Soft type (M size / L size)

Hard type

Breast Pads Honeycomb

Prevent milk leakage

- Maintains its smooth form and shape even with the heaviest flow
- Quilted honeycomb lining provides leak-proof coverage
- Individually wrapped to take with you while on-the-go
- Available in packages of 36 or 60