# STATE UNIVERSITY OF MEDICINE AND PHARMACY

**„NICOLAE TESTEMITSANU” FROM REPUBLIC OF MOLDOVA**

BREASTFEEDING, ADVANTAGES AND CHARACTERISTICS

# CHISINAU 2024

Nutritional importance and benefits of breast feeding :

* Human milk is superior to another types of commercial milk .

The composition of human milk is not constant but changes during feeding according to the time and during the course of lactation . The total volume of maternal milk production and infant milk intake is highly variable depended : 100 ml , 300 ml , 800 ml from frequency and effectiveness of sucking of baby .

* Protein component of human milk differs by quantity and quality .
* In cow’s milk casein is predominant .

The spectrum of amino acids differs in human and cow’s milk . In human predominant cysteine , taurine which are so important for development of CNS .

* Chemical properties and characteristics of human protein don’t provoke allergy and help digestion .
* In compare with cow’s milk , cow’s milk provoke gastroenteropathy , allergy and in some cases intestinal hemorrhage . Human milk assures all quantity of proteins infant needs during the first 6 months of life .

 Fats in human milk breast .

* Milk fat represents around 4 - 4,5 g / 100ml . The concentration of fat depends on mother’s alimentation . Breast milk is rich in poly- unsaturated acids which are important for development of nervous system . Fat is mostly made up from triglycerides , about 98 – 99 % . For quantity in breast milk is not constant but may change during the day .

Carbohydrates

* The main carbohydrate in human milk is lactose that facilitates activity of intestinal physiological bacterial flora . Human milk contains a higher concentration of carbohydrate , it also has a small quantity of galactose , fructose and oligosaccharide . Cow’s milk has a small quantity of carbohydrates and the lactose is A-

Type , in human milk is B-Type .

#  Protection and immune factors of human milk

* Ig-A protects against E. coli , klebsiella , pneumonia , salmonella , shigella , streptococci , candida , cholera .
* Antivirus antibody –cytomegalovirus , herpes .
* Lyzosome – antibacterial enzymes .
* Interferon – antiviral agent .

# Protection role of human milk :

Reduced incidence of diarrhea and duration of diarrhea .

Protects against respiratory infections . Protects against otitis media.

Protect against necrotic enterocolitis in the neonatal period .

Protect against bacteriemia , meningitis , urinary tract infections .

Reduce risk of inflammatory bowel syndrome Reduce risk of sudden infants death syndrome

#  Contra indications of Breast Feeding : For mother :

* Absolute – HIV infection
* Temporary – severe infections pathology in acute phase , TBC , somatic diseases , in decompensation phase , cancer in mother and taking of cytostatics .

the physical disease in mothers – diabetes with intake of oral antidiabetes .

# For Baby :

* Absolute – metabolism disorders for example : galactosemia , phenylketonuria .
* Temporary – severe affectation of newborn and sucking baby that required assistant respiratory and parenteral feeding .

# Methods for evaluation of child adequate nutrition

1. **Signs of adequate breast feeding:**
	1. satisfactory state of child between feeding time
	2. weight gaining 18-30 gr per day or 125-210 gr per week .
	3. physiological defecation usually after each feeding .
	4. swallowing heard during sucking .

# Hungry symptoms :

* 1. no increase in weight .
	2. rare urination .
	3. changes in stool , constipation or diarrhea .
	4. baby sucking his fingers .
	5. exciting child .

# Signs indicated in adequate weight gaining of the baby in time :

* 1. < 18 gr increase in weight .
	2. sleeps a lot .
	3. reduced urination .
	4. able to suck continuously .

# Nutrition efficiency

**Nutrition efficiency is evaluated according to the indices :**

* + 1. general state of baby .
		2. Physical development ( weight and height ) .
		3. Neurological development .
		4. morbidity level evaluation ( how frequent diarrhea or viral

infection … ) .

* + 1. Laboratory analysis , general blood test , urine analysis .

# Advantages of breast feeding Advantages to the baby :

**Reduced risk of developing :**

1. Gastrointestinal illness and astroenteritis in particular .
2. Middle ear infection .
3. Resp. system infection .
4. Urinary tract infection .
5. Insulin dependent diabetes .
6. Allergies .

# Advantages to the mother :

**Reduced risk of :**

1. Breast cancer .
2. Some forms of uterine cancer . **Social gains :**
	1. Ready availability for feeding the baby .
	2. Unique contact between mother and baby .
	3. May help mother to lose weight naturally

# Teach the correct positioning and attachment for breast feeding Show the mother how to hold the infant :

* + - with infant’s head and body straight .
		- facing her breast , with infants nose opposite her nipple .
		- with infant’s body close to her body .
		- supporting infant’s whole body , not just neck and shoulders .

# Bibliography:

1. Nelson Textbook of Pediatrics 21th Edition
2. Susan M., White, Andrew J. Washington Manual TM of Pediatrics, The, 1st Edition, 2009, Lippincott Williams & Wilkins.
3. Colin D. Rudolph. Rudolphs Pediatrics, The 21 st Edition, 2003.