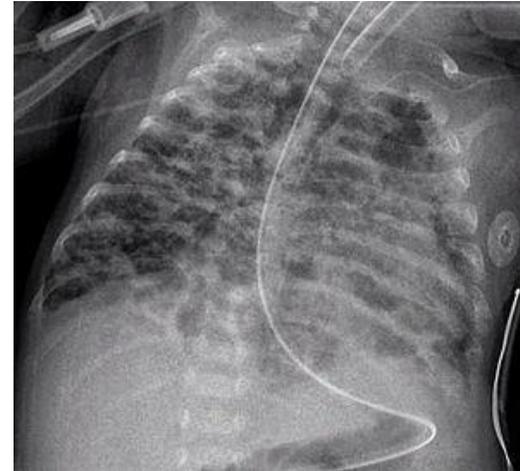




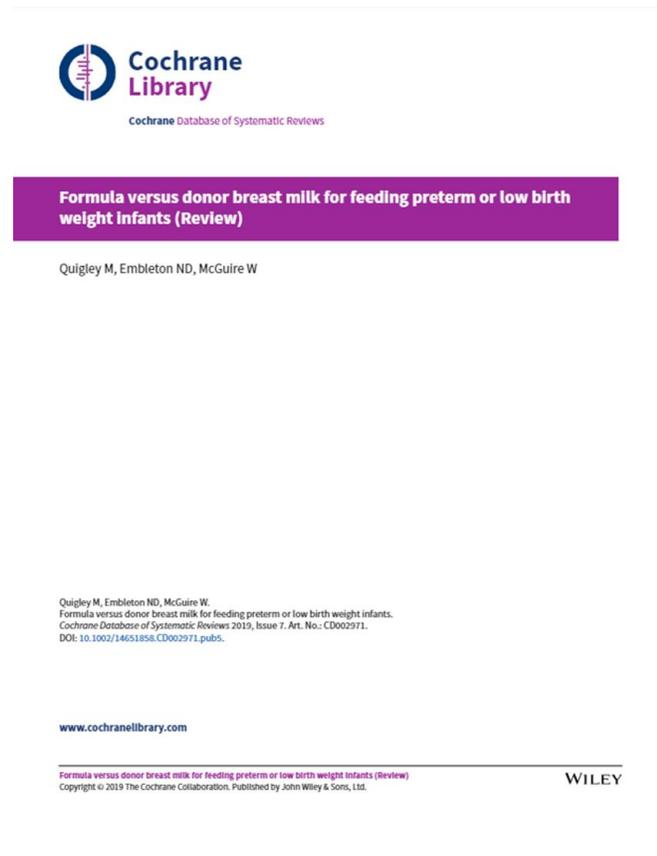
# Breastfeeding in neonatology

An Eerdekens

# Therapeutic value of human milk on the NICU



# Scientific evidence for the use of donor milk



- **Patients:** Low birth weight infants
- **Intervention:** Feeding with formula, either as a supplement to maternal expressed breast milk or as a sole diet
- **Comparisson:** donor breast milk
- **Outcome:** higher rates of
  - weight gain, linear growth, and head growth
  - higher risk of developing necrotising enterocolitis:
    - Number needed to harm: 33  
(95% CI 20 to 100; 9 studies, 1675 infants)

# What preceded...

BELGISCHE KAMER VAN  
VOLKSVERTEGENWOORDIGERS

9 januari 2020

## RESOLUTIE

ter aanmoediging van de totstandbrenging  
van moedermelkbanken in de ziekenhuizen  
en over de vaststelling van regels  
voor de werking ervan

TEKST AANGENOMEN  
DOOR DE PLENAIRE VERGADERING

## VERZOEKT DE FEDERALE REGERING

- de ziekenhuizen ertoe aanmoedigen in de diensten neonatologie lactatieondersteunende programma's uit te bouwen;
- **één ziekenhuis per gewest** aan te moedigen een moedermelkbank aan te leggen voor intern gebruik (gedoneerde moedermelk) en ze samenwerkingen te doen aangaan met de ziekenhuizen zonder dergelijke melkbanken, zodat ook zij toegang tot gedoneerde moedermelk krijgen;
- de werking van de moedermelkbanken te regelen, met name wat de inzameling, de opslag, de bewaring en de verdeling van de moedermelk betreft;
- specifieke normen uit te werken inzake de vereisten die in acht moeten worden genomen bij de donatie van moedermelk;
- een kadaster van actieve moedermelkbanken op te richten om de moedermelkvoorraad te kunnen opvolgen en de melk te kunnen traceren, om aldus tegemoet te komen aan de specifieke noden van de diensten voor neonatale intensieve zorg;
- te bewerkstelligen dat de melkbanken efficiënt samenwerken, om de eventuele overschotten en tekorten beter te beheren;
- na te denken over het opzetten van het vervoer en de overbrenging van gedoneerde moedermelk met daartoe aangepaste voertuigen;
- een handleiding met goede praktijken uit te werken inzake het voorschrijven door de artsen van het gebruik van moedermelk;
- samen met de deelstaten voorlichtingscampagnes in de kraamklinieken te voeren, opdat de moeders weet hebben van de hen geboden mogelijkheden inzake moedermelkdonatie.

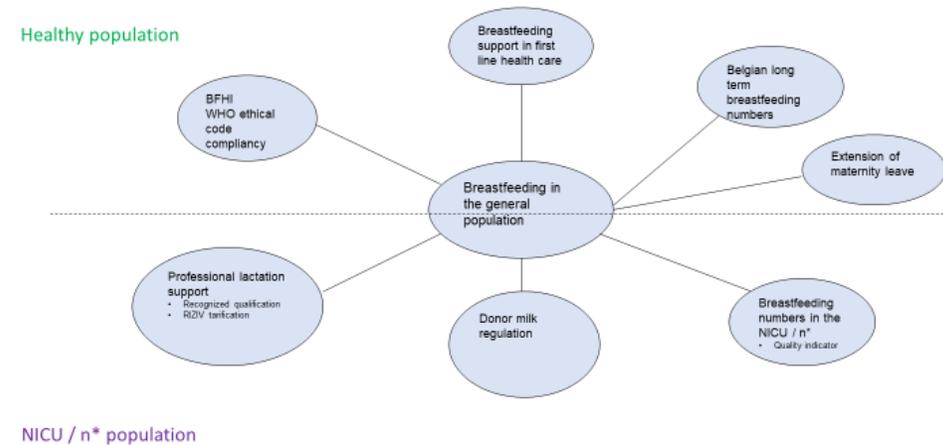
# What preceded...

- February 2021: Letter from BVN to Minister Vandenberghe
  - Need for legislative framework
  - State of affairs?
- June 2021: Answer from Ministry
  - Need for integration in development support and a widely supported breastfeeding policy
  - Further elaboration of missions of these future banks, as well as a forecast of their activity and an evaluation of the needs in this respect

# What preceded...

- October 2021:  
brainstorm

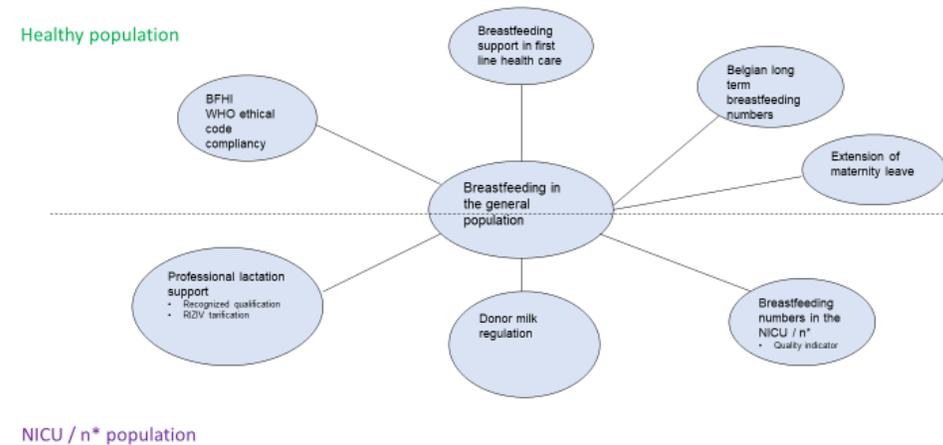
- Dominique Grossman, Chirec
- Aude Helsmoortel, Chirec
- Fleur Camfferman, UZ Brussel
- Dorottya Kelen, Hôpital Erasme
- Virginie De Halleux, CHR Liège
- Veerle Cossey, UZ Leuven
- An Eerdeken, UZ Leuven



# What preceded...

- October 2021:  
brainstorm

- **Dominique Grossman, Chirec**
- Aude Helmoortel, Chirec
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# Proposal

Professional lactation support in all NICU/N\* units

Revaluation of Human Milk reimbursement in Belgium (Royal decree 1987)

Donor milk availability and HM bank for external use

# Professional lactation support in all NICU/N\* units

- Current RIZIV nomenclature (428536, 428595, 428610) is insufficient:
  - Only midwives, not applicable by IBCLC certified (or specialized postgraduate lactation training) NICU nurses or neonatologists
  - Only outpatient nomenclature numbers are available: the mothers must not be hospitalized
  - Can only be paid for from the 6th day after the birth
  - This service can only be charged if it concerns a complication during breastfeeding, motivation needed in the file + available for the advising doctor
  - Can only be charged once a day, cannot be combined with services provided at home or with post-natal monitoring services - so a total of maximum 3 charges per birth (first / 2 follow-up visits)
- Heterogeneity in specialized lactation training:
  - International Board Certified Lactation Consultant®
    - five-yearly recertification
  - Postgraduate training in Belgium

# Professional lactation support in all NICU/N\* units

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- Heterogeneity in specialized lactation training:
  - International Board Certified Lactation Consultant®
    - five-yearly recertification
  - Postgraduate training in Belgium
- Extension RIZIV/INAMI nomenclature for use in all NICU/n\* units
  - Lactation consultants with IBCLC accreditation:
    - Midwives
    - Nurses
    - Doctors
    - Dieticians
    - Speech therapists
- Support from ministry
- First steps for submitting a dossier to the RIZIV/INAMI have been taken
- Objective: finalisation before the budget round of the autumn

# Revaluation of Human Milk reimbursement in Belgium (Royal decree 1987)

## Coût du lait maternel

Le coût du lait maternel est de 0,32 EUR/10 ml

### Combien rembourse l'assurance soins de santé ?

Quantité de lait	L'assurance rembourse
Jusqu'à 200 ml compris	la différence entre le coût du lait maternel et le montant forfaitaire à charge des parents (0,30 EUR)
Par tranche de 20 ml supplémentaire	0,62 EUR

### Combien paient les parents ?

Quantité de lait	Les parents paient
Jusqu'à 200 ml compris	le montant forfaitaire de 0,30 EUR
Par tranche de 20 ml supplémentaire	0,02 EUR

### Quelle est la base réglementaire ?

L'article 3 de l'arrêté royal du 21 mai 1987 prévoit :

« Art. 3. L'intervention de l'assurance obligatoire contre la maladie et l'invalidité dans le coût du lait maternel est fixée comme suit :

a. pour une quantité de 200 ml ou moins, l'assurance rembourse la différence entre le prix de base, qui est de 0,32 EUR/10 ml, et

l'intervention forfaitaire de 0,30 EUR à charge du bénéficiaire;

b. par tranche de 20 ml supplémentaire, l'intervention de l'assurance est fixée à 0,62 EUR. »

<https://www.inami.fgov.be>

- Indexation of RIZIV/INAMI prestation 695063: x 2.1  
= 0.67 €/10 ml (0.067 €/ml)
- Support of ministry
- First steps for submitting a dossier to the RIZIV/INAMI have been taken
- Objective: finalisation before the budget round of the autumn

# Donor milk availability and HM bank for external use: indications

- Insufficient mother's milk supply or as temporary substitute for formula feeding in **high risk infants**:
  - **Preterm infants <32 weeks of GA (28-34) or <1500 g (1000-1800g)**
  - Severe IUGR
  - Digestive malformation, post-digestive surgery, post-nec alimentation
  - Cardiac disease with potential low gut perfusion

**± 1400-1600 infants/year in Belgium**

- Discontinued after 33-34 weeks of corrected gestational age
- Most units using DM had specified guidelines for use and required parental consent

# Donor milk availability and HM bank for external use: some numbers

- Estimated cost: +/- 300 € / L (0,3 € / ml)  
(<-> 0,032 € / ml processing of mother's milk)
- Nederland: 300 €/L
- Frankrijk: 80 € /L + subsidies
- Canada/USA: 100-170 \$/L
- Zwitserland: 120-180 € /L
- PROLACTA bioscience<sup>®</sup>: 6000 € /L

# Donor milk availability and HM bank for external use

CHR citadel milk bank:  
data from 2018-2021

- 325 liter milk per year
- 110 eligible infants per year
- Average 2.4 liter/infant

Erasme, Brussels:  
data from 2018-2021

- Average 42 infants
- Average 2.2 liter/infant

UZ Leuven: data from 2021

- 142 liter milk for 111 eligible infants
- Average 1.2 liter/infant
  
- 33 receptors (average 4.3 liter/infant)  
→ 30% of infants <32 weeks and/or <1500 g

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- 111 eligible infants
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- 33 receptors (average 4.3 liter/infant) →  
30% of infants <32 weeks and/or <1500 g

**Dependent of the availability of mother's own milk:  
need of 1680 - 3840 liters donor milk in Belgium per year  
Budget of 504 000 € - 1 152 000 € per year**

## Donor milk availability and HM bank for external use: criteria

- Equipment and staff
- Donor recruitment and screening
- Expression, handling, and storage of human milk for donation to the HMB
- Milk Screening: pre- and post-pasteurization testing
- Milk Treatment (Pasteurization)
- Delivery to Recipients

### REVIEW article

Front. Pediatr., 04 March 2019 | <https://doi.org/10.3389/fped.2019.00053>



## Recommendations for the Establishment and Operation of Human Milk Banks in Europe: A Consensus Statement From the European Milk Bank Association (EMBA)

Gillian Weaver<sup>1\*</sup>, Enrico Bertino<sup>2</sup>, Corinna Gebauer<sup>3</sup>, Anne Grovslie<sup>4</sup>, Radmila Mileusnic-Milenovic<sup>5</sup>, Sertac Arslanoglu<sup>6</sup>, Debbie Barnett<sup>7</sup>, Clair-Yves Boquien<sup>8</sup>, Rachel Buffin<sup>9</sup>, Antoni Gaya<sup>10</sup>, Guido E. Moro<sup>11</sup>, Aleksandra Wesolowska<sup>12,13</sup> and Jean-Charles Picaud<sup>9,14</sup>

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<sup>3</sup>Abteilung Neonatologie Klinik und Poliklinik für Kinder und Jugendliche, Leipzig, Germany

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<sup>5</sup>First Serbian Milk Bank, Institute of Neonatology, Belgrade, Serbia

<sup>6</sup>Division of Neonatology, Department of Pediatrics, Istanbul Medeniyet University, Istanbul, Turkey

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<sup>8</sup>PhAN, Institut National de la Recherche Agronomique (INRA), Université de Nantes, CRNH-Ouest, Nantes, France

<sup>9</sup>Neonatal Intensive Care Unit, Hopital de la Croix-Rousse, Hospices Civils de Lyon, Lyon, France

<sup>10</sup>Banc de Teixit, F. Banc de Sang i Teixits de les Illes Balears, Institut d'Investigació Sanitària Illes Balears (IdISBa), Barcelona, Spain

<sup>11</sup>Italian Association of Human Milk Banks (AIBLUD), Milan, Italy

<sup>12</sup>Department of Neonatology, Faculty of Health Science, Medical University of Warsaw, Warsaw, Poland

<sup>13</sup>Laboratory of Human Milk and Lactation Research, Holy Family Hospital Regional Human Milk Bank, Warsaw, Poland

<sup>14</sup>CarMeN Unit, INSERM U1060, INRA U1397, Claude Bernard University Lyon 1, Pierre Bénite, France

# Donor milk availability and HM bank for external use: results survey

- Response rate: 19/19
  - Flanders: 7
  - Brussels: 6
  - Wallonia: 6
- Interest in use of donor milk?
  - Yes: 17/19
  - No: 1/19
  - Less or more: 1/19

# Donor milk availability and HM bank for external use: results survey

- Current status
  - Internal donor milk bank: 7/19
    - Flanders: 1; Wallonia: 2; Brussels: 4
  - Collaboration: 2/19
  - No use of donor milk: 11/19

# Donor milk availability and HM bank for external use: results survey

- Need of centralisation?
  - Pro: 13/19
  - Contra: 4/19
    - Brussels: 3
  - No opinion: 2/19

# Donor milk availability and HM bank for external use: results survey

- Regulation of centralisation?
  - 1 central bank: 8/19
  - Per region: 12/19
  - Both possibilities: 6/19

# Donor milk availability and HM bank for external use: results survey

- Regulation of centralisation?
  - All NICUs that already have an internal donor milk bank want this to continue to exist, together with external donor milk banks for the NICUs that do not have one.
  - 9/11 NICUs without an internal donor milk bank who are interested in using donor milk want to purchase this from an external milk bank

# Donor milk availability and HM bank for external use: results survey

- Financing?
  - How?
  - No cost to the patient!
  - Role for the government?
- Current financing:
  - RIZIV/INAMI
  - Hospital

# Donor milk availability and HM bank for external use: results survey

- Estimations
  - 4 - 110 patients per year
  - 1,8 - 3,75 liters per patient

# Conclusion and proposal

- Need for regulation
- Financing by the government
  - Financing per centre
  - Global financing per donor milk bank