COVID-19 related to coronavirus SARS-CoV-2 Position of the Human Milk BAnks French Association (HMBAFA)

In the current epidemic context, questions arise concerning breast milk donors and the treatment of their milk in human milk banks.

• Regarding COVID-19 infection related to SARS-CoV-2:

It is an infection with respiratory transmission by close contact (less than one meter). Human-to-human transmission of SARS-CoV-2 is possible within 48 hours of the onset of symptoms. Infection may be asymptomatic or pauci-symptomatic. It justifies all the precautions which are recommended by the health authorities in order to limit the transmission of the virus

• Regarding human milk, breastfeeding and coronavirus SARS-CoV-2:

- ✓ Breast milk has a very specific composition characterized in particular by the presence of many components which have anti-infectious properties.
- ✓ Breast milk is absolutely essential for premature infants, as it significantly reduces the risk of serious complications related to prematurity, in the short and long term. There are major health benefits for these high-risk infants.
- ✓ Breastfeeding is allowed in mothers with COVID-19, unless they have a severe infection that seriously affects their health. Breastfeeding must be carried out under strict hygienic conditions (CDC 2020, Rasmussen 2020, UENPS 2020).
- ✓ COVID19 has been very rarely described in newborns and infants. Evolution is most often benign.
- ✓ According to current data, SARS-Cov2 RNA has been found in breast milk very exceptionally and for a limited period of time. Its infectivity has not been proven to date (*Chen 2020, Chambers 2020, Groß 2020, Lui 2020, Tam 2020, Costa 200, Peng 2020*).
- ✓ SARS coronaviruses are sensitive to heat. The SARS-CoV-P9 is inactivated at 67°C for 60 min (*Duan 2003*). The so-called holder pasteurization (62.5 ° C for 30 min), which is carried out in all French human milk banks, as well as other pasteurization protocols (56 ° C for 30 min, 70 ° C for 5 min) allow to eliminate SARS-CoV-2 (Chin 2020; Chambers 2020, Wu 2020, Conzelmann2020, Walker Gregory 2020, Wang 2020, Unger 2020).
- ✓ On the other hand, refrigeration and freezing do not seem to be effective on SAR-CoV-2 (Walker Gregory2020).
- ✓ Neonatal evolution of infants breastfed by their mother positive for SARS-COV-2 is reassuring (Salvatore 2020, Bertino2020)
- ✓ The presence of antibodies specific to SARS-COV-2 in the breast milk of positive mothers has been demonstrated. Their protective role remains to be explored (Dong2020, Peng2020, Fox2020)

• Regarding breast milk donation and human milk banks:

- ✓ It is organized and supported by the French human milk banks (map at : https://association-des-lactariums-de-france.fr/carte-des-lactariums/) which all respect common regulations concerning the selection of donors based on a health questionnaire and on blood sampling (hepatitis, HIV, HTLV), as well as the handling and treatment of milk by holder pasteurization (63.5°C for 30 min), in accordance with the official *Guide to good practice* published in the official journal of the French Republic (*Guide to good practice 2008*).
- ✓ Hygiene rules applied in French milk banks protect against transmission of the virus. Donors are well informed about the importance of adhering to strict hygiene rules when collecting and transporting milk.
- ✓ Specific questions were added to the usual health questionnaire, in order to define whether or not the donor is contagious, that is to say if she has symptoms suggestive of COVID19 (fever, headache, severe asthenia, cough, diarrhea, vomiting, anosmia, etc.) or a confirmed diagnosis of COVID-19. Considering the reassuring data on the absence of passage or of a rare and very transient passage of SARS-CoV-2 RNA in breast milk, the absence of proven infectivity of milk, the effectiveness of pasteurization, the reassuring outcome of children and the presence of frequent undetected Covid19 asymptomatic mothers, the French Human Milk Bank Association (ADLF) authorizes the

donation of milk from a symptomatic mother on condition of postponing the collection of milk until the mother is no longer considered contagious.

✓ In order to protect the people who collect the donated milk, the **French Human Milk Bank Association (ADLF)** recommends temporarily suspending the collection during the period when the donor is contagious, that is to say:

- ❖ 7 days after the onset of symptoms for mothers with symptomatic COVID-19, and at least 48 hours without fever or dyspnea. In the event of fever and / or dyspnea that persist 7 days after the onset of symptoms, it is recommended to continue the suspension until a period of 48 hours without fever or dyspnea is obtained.
- ❖ 7 days after the first positive COVID-19 diagnostic test result by molecular amplification (RT-PCR, RT-LAMP) or antigen test (for mothers with asymptomatic COVID-19).

The milk collected during this period can be pasteurized.

• Regarding the treatment of milk from a mother to her own infant:

Since breastfeeding is considered possible in COVID-19 or suspect mothers, human milk banks can continue to pasteurize this own mother's milk when needed.

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Available information is subject to change and this document will be updated accordingly

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