



(Revista Misión, June 2016).- In view of the impending birth of a baby, the warning of the friends to new parents can not miss: "Make your last nights of uninterrupted sleep, because, after childbirth, no longer return to sleep as before". And it is true, when the child is born, the life of the parents gives a complete turnaround: will have to be alert the 24 hours of the day to interpret the countless demands for attention and care of their defenseless baby. However, the Nature is wise: At the same time requiring parents to give more than yes, I "give" a plus the brain that enables them to not lose heart before, for example, the tears - sometimes inconsolable- for your newborn. This has been shown by the professor Natalia Lopez Moratalla - President of the Spanish Association of Bioethics and medical ethics and teacher at the University of Navarra - in its study maternal brain, Brain paternal. Adaptation to family life styles, extracted from a more comprehensive study on the Secrets of the brain ([www.lossecretosdelcerebro.com](http://www.lossecretosdelcerebro.com)), which explains that the minds of the parents become more attentive, empathetic and flexible to achieve warn, with success, the needs of their small son.

"The experience of the upbringing of children improves the structural plasticity of the hippocampus and the prefrontal cortex. The brain of the male parents suffers a reorganization of the structure in the hippocampus and the both (father and mother) is modified in the prefrontal cortex", says the study.

### **The link attachment**

during pregnancy, not only produces a unique symbiosis between mother and son, but naturally and inevitably, this process modifies the psychology of women. The mother is going through a period of changes neuroendocrinos and behavior that adapt their brain for the care of his son. These changes are due to the so-called "Attachment" link since, in the same way that "the brain calculates the physical distance, 'mide', also, the affective relations", says Lopez Moratalla. Thus, the brain "eliminates the gap" between the parents and the child to reach a "merger" between them.

Shorten the distance between parents and child is key, since "during childhood, the child needs as ever to the family, not just to survive, but also

to establish the bonds of attachment insurance that will mark your psyche," says the expert.

The mother, the link attachment "is what nature gives" through pregnancy, childbirth and breastfeeding. On the other hand the father, for being out of the process of gestation, has to "win" that link, says the professor. But it is not difficult, therefore, as begins to participate actively in the care of your child, you create the link of parental attachment, as are synchronized, between father and son, the brain regions associated with cognitive processes-emotional.

### **A more mature brain**

Dr. Lopez Moratalla has discovered that the social brain of father man matures with the paternity. The usual physical contact with the son increases in him the cognitive empathy and eliminates stress, increases the emotional memory and improvement, even its cognitive flexibility. In addition, the brain will create and reinforce new brain circuits and generate new neurons. And, as if that were not enough, thanks to this physical contact, oxytocin is generated - known also as the hormone of confidence, which power the circuits of the social brain that help you work the memory more intensely in order to recognize the needs of your child.

The study concludes that the brain of a man who has actively exercised his fatherhood has nothing to do with another that has not had this experience. After the paternity, the vital perspective of the father completely changes: "focuses its attention on the Son, so that family decisions that will take in future will be focused on the protection of her offspring".

### **The "blind love" of a mother**

for his part, the mother is a "blind love" and indulgent, ensures the professor. This means that with the birth of the son was muted, in the brain of the mother, the mechanisms of prosecution negative, to the point that you do not see the defects of the Son. The mother feels euphoria to contemplate her baby because in his brain is raised the oxytocin - hormone from the confidence - and dopamine - hormone of happiness-, which leads to a mental state of a desire for union to its small.

Lopez Moratalla has found also that "the mother is ready to capture the emotional states of the baby through signals such as the smile or cry": the smile of your baby increases its own joy and causes it to release a large amount of dopamine, which spurs him to caress your child or to play with him. And, if the child cries, the brain of the mother is "light" and tries to interpret immediately the state of anguish of his son; their own penalty is reduced in order to identify which claims the baby.

### **Harmony with the parents**

The study also shows that modes of specific attention of the Father and the mother to her son are complementary and, above all, they have different effects and which are indispensable for the development of a baby's brain. "Over the first few years, the right hemisphere of the Son is aligned with that of the mother and the left, with that of the father. Is this harmony that allows the child's brain is active and develop", indicates Lopez Moratalla. Therefore, receive the care of both parents improves the genesis neuronal son; hence the importance, insists the professor, that children have, in its early years, the proximity of a female figure and another masculine, whether natural or adoptive parents or other relatives.

During childhood, the dependence of the attachment links insurance is so serious that it is difficult to not be aftermath when missing parents, says Lopez Moratalla. If they miss, "other persons will have to win the confidence of the child and giving you plenty of affection to fill the gap". However, when lack one of the parents, all is not lost, since "in the family environment, you can count with those who make the times of the parent who is missing", judgment Lopez Moratalla.

### **The brain multitasking**

The professor Natalia Lopez Moratalla ensures that today, thanks to the desire of parents to carry out conciliation family-work, mothers often embody to working life and parents far more involved in the care of their children since they are small. In this process, "the parental brain is enriched and the brain of the mother has become 'Multitasking'", which does not imply "do many things; means that develop areas of the brain in women that allow something as unusual as to serve more than one thing without leaving to prioritize the care of the child", says the expert.

### **A reserve of youth**

an advantage of motherhood, according to the Professor Lopez Moratalla, is that delays in the woman the aging process of your brain. In reality, everything your body benefits of a rejuvenation with each child that geste, therefore, in each pregnancy, passed to his blood - and will remain in the marrow of their bones- very young cells of each child. This increases, in women, the natural reserve of pluripotent stem cells, which regenerate their cells worn or destroyed". "By their fetal source, cells associated with pregnancy have a great capacity of self-renovation, persist for decades and can collaborate with adult stem cells in the regenerative function of the body of the woman. It is a gift of nature that, logically, takes special care to the body of the mother because it will the survival," says Lopez Moratalla.

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*Translated by catholic.net - Santiago Schietekat*