

PRESS RELEASE

Barcelona, September 28th, 2021

Sant Pau and the Protected Denominations of Origin of oil of Catalonia collaborate in a worldwide pioneering research project on Mediterranean diet and fertility

- Sant Pau starts the first research project in women of reproductive age that seeks to improve the fertility and health of the next generations.
- The Institut de Recerca de l'Hospital de la Santa Creu i Sant Pau - IIB Sant Pau, the Hospital de la Santa Creu i Sant Pau, the Fundació Puigvert and the five Protected Denominations of Origin of oil of Catalonia collaborate in this pioneer scientific project that includes physical exercise and Mediterranean diet based on the intake of extra virgin oil, or the introduction of low-dose aspirin.

Barcelona, September 28th, 2021. - About 20% of couples have fertility problems and half of these problems could be modified by introducing changes in lifestyle, such as exercising or adopting a healthy diet. Based on this knowledge and taking profit of the advantages that we have in our territory, such as extra virgin olive oil, the research group in Perinatal and Women's Medicine of the IIB Sant Pau, begins a research project to study to what extent introducing a healthy lifestyle could improve the metabolic and cardiovascular status of women who undergo in vitro fertilization.

The Institut de Recerca de l'Hospital de la Santa Creu i Sant Pau - IIB Sant Pau, the Hospital de la Santa Creu i Sant Pau and the Fundació Puigvert have presented today the scientific project *MEDITATE-IVF (Impact of Exercise and Mediterranean diet vs Aspirin on live-birth rate and cardiovascular programming in In Vitro Fertilization)*, which studies the relationship of the Mediterranean diet and healthy lifestyle habits with success in IVF treatments, with the collaboration of the five Protected Denominations of Origin of oil in Catalonia.

VIDEOS AND IMAGES: <https://flic.kr/s/aHsmWLhK3d>

Currently, similar interventions in the at-risk population have shown improvements in several highly prevalent diseases, such as cardiovascular diseases, but a study of these characteristics has never been done in women of reproductive age with the idea of improving fertility and the health of next generations. *"We want to go further and take advantage of a time when future mothers and families consider substantial changes in their lifestyle. We propose them to adopt a healthy diet, which includes the antioxidant qualities of extra virgin olive oil and adequate suugar and protein levels while incorporating physical exercise into their routine "*, explains Dr. Elisa Llubra, Director of the Gynecology and Obstetrics Service of the Hospital de la Santa Creu i Sant Pau, and researcher at the IIB Sant Pau. *"We understand the monitoring and treatment of women's health from a holistic and comprehensive approach, therefore we want to study to what extent a healthy lifestyle can help in an in vitro fertilization process"*, she concludes.

Dr. Ana Polo, Director of the Reproductive Medicine program at the Hospital de la Santa Creu i Sant Pau and Fundació Puigvert and principal co-investigator of the study at the IIB Sant Pau., explains that MEDITATE-IVF will count on a group of 750 volunteering women waiting to undergo in vitro fertilization. Participants will be randomly assigned into three intervention groups. The first group will have a program of physical exercise and a Mediterranean diet that will include the intake of extra virgin olive oil and other dietary measures recommended by experts in physical education and in diet and nutrition. The second group will receive a small-dose supplement of aspirin, and the third group will not receive either of the two interventions and will be the control group.

The objective of this project is twofold. On the one hand, it aims to increase the possibility that healthy women of reproductive age obtain better results in in vitro fertilization treatments, but also that the development of the fetus is healthier, the so-called fetal programming. *"Although the main objective of the study is to increase the rate of live newborns, this is closely related to the decrease in complications during pregnancy, mainly pre-eclampsia and low birth weight, factors that condition a higher risk of cardiovascular problems both the mother as well as the baby. Reducing the presence of pre-eclampsia in these pregnancies would lead to a lower risk of heart attack in women in the long run. Low birth weight has been related to an increased risk of developing cardiovascular and metabolic diseases in childhood, adolescence and adulthood. Therefore, reducing these complications would have an impact on the health of both the mother and the baby, in the long term"*, says Dr. Mónica Cruz-Lemini, specialist in Fetal Medicine and Fetal Programming of the Gynecology and Obstetrics Service of the Hospital de la Santa Creu i Sant Pau and principal co-investigator of the study at the IIB Sant Pau.

A proposal rooted in the territory, but with global benefits

The project has the collaboration of the five Protected Denominations of Origin (PDO) of oil from Catalonia (PDO Oli del Baix Ebre Montsià, PDO Oli de l'Empordà, PDO Les Garrigues, PDO Siurana and PDO Oli Terra Alta) that contribute with the extra olive oil of their respective PDO to the study.

Several studies in cardiovascular health for example, already support the benefits of extra virgin olive oil, especially for its antioxidant properties. *"We are fortunate to have these oils of superior category and with a certificate of origin and quality among our local produc range. Favoring the consumption of extra virgin olive oil protects our health, but also our tradition and culture, contributing to the sustainability of our own territory and environment"*, says Mr. Enric Dalmau, president of the Les Garrigues PDO and spokesperson for the five Protected Denominations of Origin for oil in Catalonia. *"Collaboration in projects like the one that starts today, strengthen our positioning and commitment to health, and help us to spread the qualities and properties of this exceptional product that we have in Catalonia,"* he adds.

Possibly the results of this study will show the need to change habits in women who undergo these techniques. Likewise, the study is expected to allow the identification of therapeutic options for the future related to the success of fertilization, the health of the mother and the development of the fetus, or to serve as a starting point for other studies related to the prevention of cardiovascular risk in later life. As in all research projects, the results of the study will be published and shared in the scientific environment so that they are available to the entire clinical and scientific community, thus achieving a global impact.

Collaborators



Financing



The

MEDITATE-IVF study (*Impact of Aspirin on live-birth rate and cardiovascular programming in In Vitro Fertilization*) is financed by the Carlos III Health Institute, Acción Estratégica en Salud, Proyectos de Investigación en Salud, PI20 / 001504.

Exercise and Mediterranean diet vs

More information and interviews

Institut de Recerca Hospital de la Santa Creu i Sant Pau - IIB Sant Pau

Laia Cendrós Ollé | Head of Communications – Cap de Premsa

lcendros@santpau.cat - T. +34 681 039 455

Hospital de la Santa Creu i Sant Pau

Abraham del Moral | Press Officer - Cap de Premsa

adelmoralp@santpau.cat – T. +34 646 391 548