

www.toxicsarebreakingourballs.ie



LAUNCHING OF THE FIRST NATIONAL STUDY OF SPERM IN IRELAND

- **Environmental pollution with toxic chemicals is the main cause of poor sperm quality**
- **From today, Irish males can get to know the quality of their sperm, free of charge and anonymously**

Dublin. December 11th, 2018. - "Toxics are breaking our balls". Under this slogan starts the First Study on Male Fertility in Ireland, promoted by Institut Marquès. This international centre for assisted reproduction is pioneer in demonstrating to the scientific community that the causes classically attributed to the worsening of sperm quality (such as stress, tight pants, alcohol, etc.) are a myth. As the studies in Spain stated, the reality of the problem comes from toxic chemicals.

Why a study on the sperm of the Irish?

In 2017, the birth rate in Ireland dropped a 2.74% respect the previous year, and achieved 12.9 births per 1,000 inhabitants, with a fertility rate in decline, set at 1.92 children per woman.

In recent years, a slow but steady decrease in the number and the quality of sperm, regarding its motility and morphology, has been observed. In 6 of every 10 couples who

turn to assisted reproduction treatments to become parents, sperm presents alterations in greater or lesser degree.

Ireland does not have yet any prospective study that evaluates the sperm quality of the male population. The first National Study of Sperm in Ireland will allow to determine the sperm quality of the Irish men, as well as to try to establish to what extents factors like environmental toxics impinge on its deterioration.

Toxics, main cause of bad sperm quality

In addition to genetic factors and medical history, male fertility depends on environmental factors often unknown by the population. These environmental factors are chemicals commonly used in industry, agriculture and at home, that can interfere in the development of the testicles, and it is proven that they harm the reproductive capacity. According to Dr Marisa López- Teijón, CEO of Institut Marquès, *“Males are more exposed than females to suffering of infertility by the action of pollutants”*.

The first contact with toxic chemicals starts already at the beginning of life, since these get from the maternal blood to the embryo through the placenta. The type of toxic substance and the amount will thereof depend on the levels that the mother has. The so-called endocrine disruptors are a long list of compounds that behave like oestrogen: that is, they behave as a female hormone without being one. The action of testosterone, the male hormone, is very important during the development of the foetal testicles, during the second and third month of pregnancy. However, these fake oestrogens compete with testosterone and do not let it properly exercise its function. Less sperm producing cells are built and, in the most severe cases, they produce (genetic) chromosome alterations in the testicles.

These substances are very resistant to biodegradation. They are present in our food and in the environment; they accumulate in the human body, especially in the fat, and humans and animals are not designed to get rid of them.

Environmental pollution by toxics is causing a worsening of the sperm quality. This is happening both in industrialised as well as in rural areas that are in contact with pesticides, therefore there are large geographical variations. Previous studies on male fertility carried out by Institut Marquès in Spain confirmed a lower sperm quality in those areas where the presence of this type of chemical substances was higher.

In addition, the trial poses a good opportunity so that Irish men can have the quality of their semen tested in a voluntary, free and anonymous way and thus be able to prevent future problems. Substantial evidence relates semen quality with certain diseases; hence semen quality can be considered a general health biomarker.

Anonymous and free of charge semen analysis for Irish men

Starting today, all Irish males over 18 years can get to know the quality of their semen via a confidential and free of charge sperm analysis. In order to enrol, you should access the website <http://www.toxicsarebreakingourballs.ie>, fill out the online form and reserve a date and time to deliver the sperm sample at the facilities of Institut Marquès in Dublin and Clane. Once analysed the sample, a specialist will provide you with a complete report, either in-person or by Skype or telephone.

According to the CEO of Institut Marquès, Dr Marisa López- Teijón, the study is *“a good opportunity for the Irish males to know the quality of their semen in an easy, free of charge and confidential way, handled by experts. This information can help them, if necessary, to treat any possible seminal alteration through an early diagnosis”*.

Specialists in assisted reproduction believe that, starting from 18 years old, all males should have their sperm analysed. *“An altered result of this diagnostic test can warn about important abnormalities and, in many cases, help prevent, avoid or cure disorders that can cause infertility and that usually go unnoticed”*, warns Dr Ferran García, Director of the Andrology Department at Institut Marquès.

Objectives of the study

The First Study on Male Fertility in Ireland has a double objective:

- Determine the possible environmental incidence according to the geographical areas where the mothers of the Irish males have lived. The results will be analysed using a database that will include the province of residence of the mothers of the participants until pregnancy, since there is a close correlation between the place of residence of the pregnant women and the seminal quality of their children, because of the incidence of environmental factors.
- Raise awareness among the male population about the importance of their reproductive health as a part of their physical and psychic well-being, as well as inform the society about possible prevention measures.

Information campaign “Toxics are breaking our balls”

The study is accompanied by an informative campaign that will help clarifying concepts and eradicating clichés.

Institut Marquès requests the collaboration of the media so that this campaign reaches all Irish males.

About Institut Marquès

Institut Marquès is an international reference centre in Gynaecology, Obstetrics and Assisted Reproduction with presence in Ireland (Dublin and Clane). With extensive experience in special hardship cases, we help people from over 50 countries to make their dream of becoming parents true. Institut Marquès has the highest pregnancy success rates.

Leader in innovation, Institut Marquès has developed an important investigation line about the benefits of music at the beginning of life and foetal stimulation. Since 2002, Institut Marquès has been carrying out studies that link environmental toxics to infertility and to the results of fertility treatments.

After assessing the impact of pollution in health and fertility, Institut Marquès has decided to play its part to fight against this worrying trend, to the extent possible. This is why we have initiated the Forest of Embryos, a Corporate Social Responsibility project in collaboration with the environmental organisation “L’Escrúçó” in Tarragona. With their help, we are planting a tree for each child born thanks to our Assisted Reproduction treatments.

Furthermore, Institut Marquès supports the manifesto from “Citizens for Science in Pesticide Regulation”. This is a citizen’s platform that claims for a reform of the use of pesticides in the European Union and advocates for an independent regulation without vested interests.

More information:

<http://www.toxicsarebreakingourballs.ie>

<https://www.institutmarques.ie/study-on-semen-quality/>

<http://www.fertility-experiences.com/infertility-and-chemical-substances-endocrine-disruptors/>

<http://www.fertility-experiences.com/why-is-male-fertility-decreasing/>

<https://www.institutmarques.ie/male-infertility/sperm-analysis/>