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Menstrual blood: Don't waste, treasure it

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Even now, in the 21st Century myths about menstruation and sex are deep rooted in our society -menstruation is considered to be “dirty and impure”. Taboos and cultural beliefs associated with menstruation are the reasons many women are uncomfortable talking about it. These challenges negatively impact female health, education, safety, and independence, and therefore, underscore the relevance of menstrual health education in order to advance female well-being.

Period blood is a highly dynamic and powerful substance. Scientists in Japan have found that cells taken from menstrual blood can be cultured in the laboratory and used like stem cells, which can even repair damaged heart tissue. Scientists devoted to researching stem cells found that the lining of the uterus, which is a main constituent of period blood, have an abundance of stem cells. Period blood stem cells proliferate faster than the stem cells in the umbilical cord and can be manipulated to transform into all kinds of cells, including those found in fat, muscle, bone, and nerves.

Menstrual fluid consists of blood as well as extra tissue from the uterine lining. It also can contain the remnants of the egg that travelled down the fallopian tube into the uterus during ovulation and wasn't fertilized. The newly defined adult stem cells are menstrual blood-derived stem cells (MenSCs), giving rise to hopes in clinical application of these cells. They are mesenchymal-like stem cells that can be harvested from monthly human menstrual blood shedding of endometrium. Women felt better about their periods after being made aware of the ability to donate menstrual fluid, meaning that MenSC therapy can be beneficial for donors and patients alike. The average volume of menstrual fluid during a monthly menstrual period is 35 milliliters (2.4 tablespoons of menstrual fluid), with 10–80 milliliters (1–6 tablespoons of menstrual fluid) considered typical.

About half of menstrual fluid is blood. This blood contains sodium, calcium, phosphate, iron, and chloride, the extent of which depends on the woman. In addition to blood, the fluid consists of cervical mucus, vaginal secretions, and endometrial tissue. Vaginal fluids in

menses mainly contribute water, common electrolytes, organ moieties, and at least 14 proteins, including glycoproteins.

To collect, bring a jar with you to the toilet, and when you have removed the cup from inside your body, transfer the contents of it into the jar and close the lid. Always store your period blood in the fridge and use it quickly. Menstrual fluid may have an unpleasant odor, but given how period blood isn't exactly a rare substance, there is no need to 'save it for later' and let it get stale.

Menstrual Fluid Banking

Stem cells derived from menstrual fluid are extremely rich in Mesenchymal stem cell. Over the years, these cell has been utilised in various cosmetic and regenerative procedures with astounding success. The successes of these procedures lie in the ability of these Mesenchymal Stem Cells to form cells, tissues or organs that need repair or regeneration. The fact that these cells are autologous and risk free, increases its application in the field of regenerative medicine, plastic surgery and cosmetology manifold.

By virtue of ReeLabs' revolutionary, patented, proprietary technology, a collection of about 10 to 15 ml of menstrual fluid could easily yield between 10 million to 100 million Mesenchymal Stem cells. The cells are collected from a single sample and processed, purified, harvested, amplified and suitably stored under appropriate GMP and GLP conditions. The laboratory can also suitably culture and amplify these stem cells yielding two to ten times its original count. Hence occasionally, even an insufficient original quantity can also be processed, cultured and suitably amplified before commencement of therapy.

What was so far considered to be unsanitary human biological waste, can now provide the client with a new lease of life. Recent research has shown that menstrual stem cell banking provides women with a unique opportunity to collect and preserve vital stem cells that can be harvested from the body's menstrual blood.

The collection of menstrual blood is painless, hassle free and can be done easily at home. It involves collection of stem cells from specialized sterile cups on the first day of a woman's menstrual cycle. They can also be collected and harvested multiple times depending on the therapy envisaged. The menstrual stem cells are unique because, in spite of being adult cells, they have many properties similar to bone marrow and embryonic cells.

Whilst Umbilical cord and Cord Blood can only be stored once, menstrual blood can be preserved at any age and multiple times. An indispensable arm of ReeLabs conducts sophisticated, state-of-the-art stem cell research for a number of degenerative disorders. It employs the latest, most effective techniques by various experts and specialists considered leaders in their fields.