



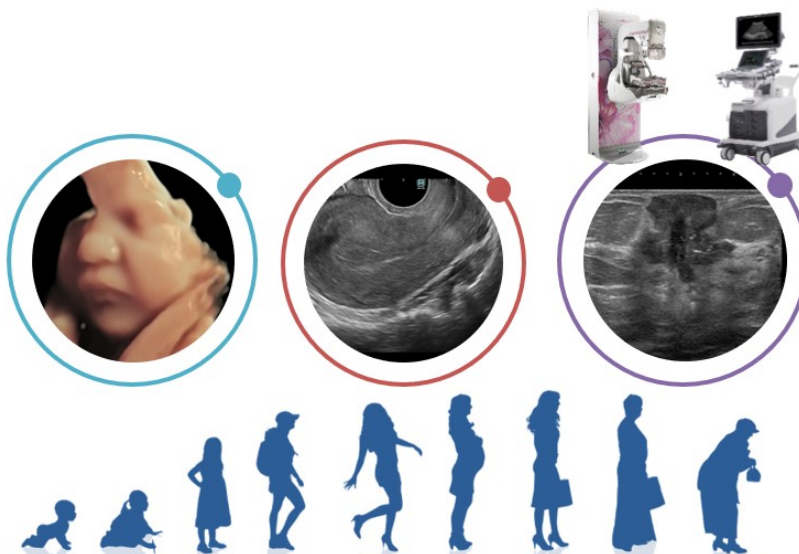
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How Fujifilm highlights the importance of Women's Health by offering a complete range of solutions

Women experience various diseases and conditions during their life owing to their distinct gender-based physiological characteristics or socio-cultural discrimination. Such “reproductive health-based conditions” constitute a major cause of morbidity and mortality of women worldwide. According to WHO, in 2017, approximately 810 women died daily from preventable pregnancy-related causes, 94% of which belonged to low- and middle-income countries¹. In 2020, 685,000 women died of breast cancer worldwide². Additionally, in 2017, heart disease was a leading cause of death in women in the United States³.

Thus, women should undergo timely disease screenings at various stages in life to prevent the onset and progression of these myriads of diseases. Fujifilm provides a one-stop solution for the technological assessment of conditions (such as pregnancy, involving both fetal and maternal health, as well as cancers of the reproductive organs (ovaries, breast, and uterus)), from screening, diagnosis, treatment to ultimately follow-up.





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The technologically superior range of ultrasound systems by Fujifilm covers all stages of a woman's life via a complete range of solutions. These cover the following fields of investigation (among others):



Obstetrics & Gynecology

In the past decade, there has been a tremendous increase in the number of high-risk pregnancies worldwide, primarily due to a significant rise in lifestyle conditions, such as diabetes, hypertension, obesity, advanced maternal age, etc.⁴ These conditions have a direct impact on both maternal as well as fetal health.

Fujifilm presents a complete range of ultrasound devices, from ARIETTA 50, which is a primary system, to ARIETTA 850, which offers premium diagnostic evaluation.

These devices enhance the diagnostic accuracy of examination by providing high-quality images for Fetal Medicine specialists and Gynecologists.



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A very important aspect to consider during pregnancy is Fetal Heart. It is reported that approximately 1% of infants are suffering CHD (Congenital Heart Diseases). With early detection of CHD, the survival rate of affected infants is improved by >50%.⁵

With recent advancements in ultrasound technology, direct observation of fetal heart function has been made possible.

Some of the critical aspects involve a fetal heart package for advanced cardiac assessment, which includes 2D-tissue tracking, tissue doppler (color and PW), dual gate doppler, auto fetal heart rate, etc. As mentioned by Dr. Julene Carvalho, a fetal cardiologist working at the St. Georges' and Royal Brompton Hospital, "the addition of color via bidirectional power doppler, during the sequential segmental analysis of the fetal heart, provides a lot of definition to the images," which in turn facilitates diagnostic evaluation.⁶

In addition, the use of 3D/4D in obstetrics and gynecology has drastically improved the ultrasound scanning experience with photorealistic surface renderings and modern tools for analyzing even complex internal structures, such as fetal brain and spine for a comprehensive assessment of the central nervous system, uterus, and ovaries by new renderings, such as translucence, specular, 4D shading flow, and Curved Multiplanar Rendering (CMPR).

Complete assessment for breast cancer

Breast cancer is the most prevalent form of cancer in women, affecting almost 7.8 million of them worldwide, as recorded by the end of 2020². Currently, mammography, followed by tissue biopsy, is the gold standard for the screening and early diagnosis of breast cancer. However, ultrasound screening along with mammography could be more effective in the detection of breast cancer. Ultrasound excludes any radiation exposure, can be effectively used in women at high risk of cancer or the ones with dense breasts, can be used to perform biopsy procedures, and to evaluate specific areas of pain as well.

Thus, Fujifilm has developed these ultrasound scanning devices to enhance the ease of diagnosis and enable advanced functional imaging analyses for timely evaluation of fetal/maternal health and diagnosis of breast cancer. Recent improvements in this technology allow these ultrasound scans to perform fusion imaging in combination with CT and MRI for multimode assessment.



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To learn more about the use of these devices in fetal heart/Obstetrics visit our [clinical applications](#).

References

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