Shettles Method: Research Overview

Internal Genesyx reference

The method in brief

The Shettles Method is a natural sex-selection approach associated with the work of Landrum B. Shettles. Its central idea is that X- and Y-bearing sperm may behave differently, and that intercourse timing in relation to ovulation, together with conditions in the reproductive environment, may influence which sperm fertilises the egg.

The best-known timing rule recommends intercourse several days before ovulation when trying for a girl and close to ovulation when trying for a boy. Preconception nutrition is not part of the original timing rule, but human studies have also examined mineral intake, overall energy intake and combined diet-and-timing programmes in relation to the sex of the baby.

How Genesyx uses it

The Shettles Method is an external framework; Genesyx did not develop it. The programme brings cycle tracking, ovulation timing, nutrition and pH monitoring together so that a user can follow the chosen routine consistently. The studies below give background on individual parts of the approach; they do not test Genesyx as a complete programme.

Study notes

The papers cover timing and diet in humans, alongside laboratory work on sperm behaviour. Each result should remain connected to the study design and sample that produced it.

[1] Noorlander, Geraedts and Melissen, 2010

This prospective study followed women hoping for a girl and combined a low-sodium, high-calcium diet with intercourse well before ovulation. Among the 32 women who satisfied the combined prediction rule, 26 had girls, or 81%, with a reported 95% confidence interval of 68-95%. In the prospective validation group, 16 of the 21 women who met the criteria had girls, or 76.2% (P = 0.005).

[2] McSweeney, 2011

McSweeney conducted a blind prospective study with 99 couples using the Billings ovulation marker to time intercourse. The baby's sex matched the study's prediction in 94 of 99 births: 78 of 81 male predictions and 16 of 18 female predictions. The protocol was described as natural family planning rather than as a trial of the Shettles Method.

[3] Oyeyipo, van der Linde and du Plessis, 2017

This laboratory study used 18 experimental human semen samples and FISH analysis to identify the sex-chromosome ratio after exposure to different pH, temperature and oxidative conditions. At pH 5.5, the viable X-bearing fraction rose from 55% in the untreated sample to 62% after processing. At pH 8.5, the Y-bearing fraction was 47%, compared with 45% in the untreated sample, and several motility measures were highest under the alkaline condition. These percentages describe sperm fractions, not pregnancy outcomes.

[4] You and colleagues, 2017

You and colleagues scored 58,489 human spermatozoa across three experiments using samples pooled from four donors. Under several prolonged-incubation conditions, Y-bearing sperm showed lower viability and greater signs of cellular stress than X-bearing sperm. The overall effect of pH on the Y:X ratio was not statistically significant.

[5] Cui, 1997

Cui used PCR to identify 871 individual human spermatozoa as X- or Y-bearing and carried out detailed morphology measurements on 217 normally shaped cells. Several average measurements were larger or longer for X-bearing sperm, including parts of the head, neck and tail. These were differences between averages across the measured cells.

[6] Mathews, Johnson and Neil, 2008

This prospective observational study followed 740 first-time pregnant women in the United Kingdom; detailed preconception diet data were available for 721. Boys accounted for 56% of births among women in the highest third of preconception energy intake, compared with 45% in the lowest third. The authors also reported associations with several nutrients, including sodium, calcium and potassium. The study observed existing diets rather than assigning a controlled diet.

[7] Farhud and colleagues, 2022

Farhud and colleagues reported retrospectively on 285 women who entered a three-month programme involving diet, ovulation timing and lifestyle guidance. Among participants with a recorded birth, the desired sex was reported for 73 of 88 births in the first cohort (82.95%) and 46 of 53 in the second (86.79%). This was an uncontrolled retrospective report. The abstract says 52 pregnancies in the second cohort, while Table 3 uses 53, the denominator behind 86.79%.

[8] Harlap, 1979

Harlap analysed 3,658 births among women whose timing of resumed intercourse could be estimated in relation to ovulation. The proportion of boys varied across the timing groups and reached 65.5% in the subgroup estimated to have resumed intercourse two days after ovulation. The detailed pattern is not the same as the usual Shettles timing rule.

[9] Goodall and Roberts, 1976

Goodall and Roberts reported greater motility among sperm classified as Y-bearing in 21 laboratory experiments using material from two donors. That finding is consistent with the older explanation that Y-bearing sperm may move faster. The study used the quinacrine or F-body identification methods available at the time, rather than modern FISH or PCR.

[10] Kaiser and colleagues, 1974

Kaiser and colleagues examined semen from 73 donors and cervical-mucus penetration in 59 cases. They reported a Y-bearing fraction of 54.2-56.7% after penetration, compared with a mean of 46% in the starting samples. The paper used older fluorescent sex-chromatin classification rather than current chromosome-identification techniques.

Overall

Independent human studies have reported associations between intercourse timing, preconception diet and the sex of the baby. Laboratory studies have also reported average differences in viability, motility, size and environmental response between X- and Y-bearing sperm.

The papers do not all test the same protocol and should not be collapsed into one headline percentage. A timing result should be cited as a timing result; an in-vitro pH result should stay an in-vitro result; and a retrospective clinic report should retain that description.

References and links

1. Noorlander AM, Geraedts JPM, Melissen JBM. Female gender pre-selection by maternal diet in combination with timing of sexual intercourse - a prospective study. *Reproductive BioMedicine Online*. 2010;21(6):794-802. PubMed | DOI

2. McSweeney L. Successful sex pre-selection using natural family planning. *African Journal of Reproductive Health*. 2011;15(1):79-84. PubMed | Journal

3. Oyeyipo IP, van der Linde M, du Plessis SS. Environmental Exposure of Sperm Sex-Chromosomes: A Gender Selection Technique. *Toxicological Research*. 2017;33(4):315-323. PubMed | PMC | DOI

4. You YA, Kwon WS, Rahman MS, Park YJ, Kim YJ, Pang MG. Sex chromosome-dependent differential viability of human spermatozoa during prolonged incubation. *Human Reproduction*. 2017;32(6):1183-1191. PubMed | DOI

5. Cui KH. Size differences between human X and Y spermatozoa and prefertilization diagnosis. *Molecular Human Reproduction*. 1997;3(1):61-67. PubMed | DOI

6. Mathews F, Johnson PJ, Neil A. You are what your mother eats: evidence for maternal preconception diet influencing foetal sex in humans. *Proceedings of the Royal Society B: Biological Sciences*. 2008;275(1643):1661-1668. PubMed | PMC | DOI

7. Farhud D, Mokhtaryan-Gilani T, Mokhtarian Gilani T, Azimi N, Kiani Z. Using Non-Invasive Methods to Choose Gender; Sex Selection with Diet and Determination of Ovulation Time in Iran. *Iranian Journal of Public Health*. 2022;51(8):1886-1892. PubMed | PMC | DOI

8. Harlap S. Gender of Infants Conceived on Different Days of the Menstrual Cycle. *New England Journal of Medicine*. 1979;300(26):1445-1448. PubMed | DOI

9. Goodall HW, Roberts AM. Differences in motility of human X- and Y-bearing spermatozoa. *Journal of Reproduction and Fertility*. 1976;48(2):433-436. PubMed | DOI

10. Kaiser R, Broer KH, Citoler P, Leister B. Penetration of spermatozoa with Y-chromosomes in cervical mucus by an in-vitro test. *Geburtshilfe und Frauenheilkunde*. 1974;34(6):426-430. PubMed

Papers included

Mathews_2008_Preconception_Diet_and_Foetal_Sex.pdf
Oyeyipo_2017_XY_Sperm_and_Environmental_Exposure.pdf
Farhud_2022_Diet_Ovulation_Timing_and_Sex_Selection.pdf