



Baarista Sare Aneuploidy ee lagu Sameeyo DNAda Ka Madax Banaan Unugga

Tilmaan ku saabsan baarista uur jiifka

Xarunta Caafimaadka Jaamacadda Washington, waxaan iskaashi la sameynaa bukaanka iyo qoysaskooda si go'aan looga gaaro daryeelka caafimaadkooda.

Warqadaan waxaa laga helaa macluumaad oo adiga kugu kaalmeeya in aad go'aan ka gaartid haddii Aad rabtid in aad qaadatid baarista sare aneuploidy. In aad qaadatid baaristaan, adiga ayay ku jirtaa. Dadka qaar uma arkaan in baarista noocan ay waxtar leedahay. Waad diidi kartaa baarista waqtii kasta.

Warqadahaan waxay sharaxaan baarista iyo qaar ka mid ah erayada caafimaadka. La hadal bixiyehaada daryeelka caafimaadka si aad in badan uga ogaatid.

Maxay tahay baarista sare aneuploidy ee lagu sameeyo DNAda ka madax banaan unugga?

Baarista sare aneuploidy ee lagu sameeyo DNAda ka-madax banaan unugga waxaa loo adeegsadaa dhiigga laga qaado garabka. Waa baaris la samayn karo laga bilaabo marka uurka gaaro 10 todobaad. Baarista waxay ogaataa cilliadaha qaar ee lagu arko cunugaada ee la xariira kromosoomka. Kromosoomka waa "qiyaasta" DNAda ku jirta gudaha unugyadena.



Baarista aneuploidy waxay bilaaban kartaa marka uurka gaaro 10 todobaad.

DNAda waa *aashitada deoxyribonucleic*, waa mokekul qaada macluumaadka genetikada, jiil ilaa jiilkha xiga. Inta badan DNA waa lagu keydin karaa gudaha unugyada jirkena. DNAda ka madax banaan unugga kuma dhextirto unugga. Qof kasta wuxuu leeyahay DNA ka madax banaan unugga uu ku dhextirto dhiigga. Marka aad xaamilo tahay, inta badan DNAda ka madax banaan unugga dhiigaada waxay ka yimadaan dhankaada, hase ahatee qaar waxay ka yimadaan uur jiifka.

Baaristaan, shaybaarka wuxuu cabbiraa iskudarka qiyaasta DNAda ka madax banaan unugga, kromosoomyada 21, 18, 13, iyo X ee ku jira dhiigaada. Haddii ay jirto qiyaas DNA aan caadi ahayn ee ka socota mid ka mid ah kromosoomyadaan ku jira dhiigaada, waxay aad ugu badan tahay in cunugaada uu qabo aneuploidy taasoo la xariira kromosoomkaas.

Maxay tahay cilladda aneuploidy?

Aneuploidy waxaa lala kulmaa marka qofka leeyahay koobiyo dheeraad ah ama marka ay maqan yahiin koobiyo la xariira kromosoomyada qaar.

Inta badan dadka waxay haystaan 2 koobi oo midkiibuu ka kooban yahay 23 kromosoom kala duwan, taasoo marka leysku daro noqota 46. *Trisomy* waxaa lala kulmaa marka ay jiraan 3 koobi oo ku saabsan kromosoomka qaar ee dhamaan unugyada ku jira jirka. *Monosomy* waxaa lala kulmaa marka uu jiro 1 koobiga kromosoomka qaar ee ku jira dhamaan unugyada jirka.

- **Trisomy 21** waxaa lala kulmaa marka ay gudaha dhamaan unugyada ku jiraan 3 koobi oo ah kromosoomka nambarka 21. Waa sababta caadi ahaan uu badan ee ka dambeysa xaaladda geneetikada lagu magacaabo *calaanadda Down*.
- **Trisomy 18** waxaa lala kulmaa marka ay jiraan 3 koobiyada kromosoomka 18 ee ku jira dhamaan unugyada. Xaaladaan waxaa kaloo lagu magacaabaa *calaanadda Edward*.
- **Trisomy 13** waxaa lala kulmaa marka dhamaan unugyada ku jiraan 3 koobi oo ah kromosoomka 13. Xaaladaan waxaa kaloo lagu magacaabaa *calaanadda Patau*.
- **Monosomy X** waxaa lala kulmaa marka uu jiro 1 koobiga kromosoomka X. Waa sababta ugu badan oo ka dambeysa xaaladda geneetikada lagu magacaabo *calaanadda Turner*.

Maxay yahiin manaafacaadka laga helo baaristaan?

- Waa baarista ugu saxsan xagga aneuploidy ee la heli karo maanta.
- Qaadashada baaristaan **uma** keento halis uur jiifkaada.
- Waxaa dhici karto in natijada caadiga ku siiso kalsooni oo hoos u dhigta walwalka laga yaabo in aad ka qabtid caafimaadka cunugaada.

Maxay yahiin waxyaabaha ka dhiman baaristaan?

- Baarista sare aneuploidy waxayogaataa **ku dhawaad** dhamaan kiisaska Down, trisomy 18, trisomy 13, iyo monosomy X. **Hase ahatee, kuuma sheegi karto haddii cunugaada uu qabo qaar ka mid ah cilladahaan.**
- Ma badna in natijada soo saarto cillad, inkastoo uu jiifka **uusan** qabin aneuploidy.
- Ma badna in natijada ahaato caadi, xataa haddi uu jiifka **uu** qabo aneuploidy.
- Ku dhawaad 1% kambyoonaha dhiigga (1 marka la soo qaado 100) lama turjumi karo. Haddii taasi ay dhacdo, ma heli doontid natijo.
- Baarista sare ee aneuploidy ma baarto cilladaha la xariira kromosoomyada kale, cilladaha kale ee la xariira dhalashada, ama xaaladaha baarista kale.

Maxay tahay macnaha ku jira marka natijada tahay caadi?

Macnaha natijada caadiga waa in ay **yar** tahay in cunugaada uu qabo aneuploidy.

Su'aalo?

Su'aalaha aad qabtid waa muhiim. Wac takhtarkaada ama bixiyeha daryeelka caafimaadka haddii aad qabtid su'aalo ama arrimo.

Kliinikada Baarista Uur Jiifka (Prenatal Diagnosis Clinic): 206-598-8130

Haddii baarista soo saarto cillad, sidee ayaan ku xaqiijin karaa natijada?

Haddii aad rabtid in aad xaqiijisid in cunugaaada uu qabo aneuploidy:

- Ka hor inta aadan dhalin, waxaa *cad la baaro laga qaadi karaa ibada* (*chronic villus*) (CVS) ama baarista *amniocentesis*. Fadlan weydiiso qoraalada sharaxa baaristaan.
- Kaddib marka la qaado, qiyas yar oo dhiig ah ayaa laga qaadi karaa cunugaada si loo baaro kromosoomyada cunugaada.

Advanced Aneuploidy Screening with Cell-Free DNA

A guide to prenatal testing

At University of Washington Medical Center, we partner with our patients and families in making decisions about their health care.

This handout gives information to help you decide if you want to have an advanced aneuploidy screening test. Having this test is up to you. Some people do not find this type of test to be helpful. You may refuse testing at any time.

This handout explains the screening test and some medical terms. Talk with your health care provider to learn more.

What is advanced aneuploidy screening with cell-free DNA?

Advanced aneuploidy screening with cell-free DNA is done using blood drawn from your arm. It can be done starting at 10 weeks of pregnancy. The test screens for specific disorders in your baby that are related to chromosomes. Chromosomes are the “packages” of DNA contained in our cells.

DNA is *deoxyribonucleic acid*, a molecule that carries genetic information from one generation to the next. Most of our DNA is stored inside the cells of our body. *Cell-free DNA* is not contained within a cell. Everyone has some cell-free DNA in their blood. When you are pregnant, most of the cell-free DNA in your blood is from you, but some is from your fetus.

In this test, the lab measures the total amount of cell-free DNA from chromosomes 21, 18, 13, and X in your blood. If there is an abnormal amount of DNA from one of these chromosomes in your blood, there is a high chance that your baby has aneuploidy for that chromosome.



Aneuploidy screening can start in the 10th week of pregnancy.

What is aneuploidy?

Aneuploidy is when a person has extra copies or missing copies of certain chromosomes.

Most people have 2 copies each of 23 different chromosomes, for a total of 46. *Trisomy* is when there are 3 copies of a certain chromosome in all of the cells in the body. *Monosomy* is when there is only 1 copy of a certain chromosome in all of the cells in the body.

- **Trisomy 21** is when there are 3 copies of the chromosome number 21 in all cells. It is the most common cause of a genetic condition called *Down syndrome*.
- **Trisomy 18** is when there are 3 copies of chromosome 18 in all cells. This condition is also called *Edward syndrome*.
- **Trisomy 13** is when there are 3 copies of chromosome 13 in all cells. This condition is also called *Patau syndrome*.
- **Monosomy X** is when there is only 1 copy of the X chromosome. It is the most common cause of a genetic condition called *Turner syndrome*.

What are the benefits of this test?

- It is the most accurate screening test for aneuploidy available today.
- Taking this test does **not** pose any risk to your fetus.
- Normal results may be reassuring and help lower anxiety you may have about your baby's health.

What are the limitations of this test?

- Advanced aneuploidy screening detects **nearly** all cases of Down syndrome, trisomy 18, trisomy 13, and monosomy X. **But, it will not tell you for sure whether or not your baby has any of these disorders.**
- Rarely, the result will be abnormal, even though the fetus **does not** have aneuploidy.
- Rarely, the result will be normal, even though the fetus **does** have aneuploidy.
- About 1% of blood samples (1 out of 100) cannot be interpreted. If this happens, you will not get a result.
- Advanced aneuploidy screening does not test for any other chromosome disorders, other birth defects, or other genetic conditions.

What does a normal result mean?

Questions?

Your questions are important. Call your doctor or health care provider if you have questions or concerns.

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A normal result means that the chances of your baby having aneuploidy are **very low**.

If the test is abnormal, how can I confirm the results?

If you want to confirm that your baby has aneuploidy:

- Before you deliver, you can have a *chorionic villus sampling* (CVS) or an *amniocentesis* test. Please ask for handouts that describe these tests.
- After delivery, a small blood sample can be taken from your baby to test your baby's chromosomes.