



Badbaadada bakteeriyada ee Biyaha Ceelka

Maaha suurtagal in biyaha laga baaro noole kasta oo ili ma qabatay ah oo cudur keena, laakiin way fududahay in laga baaro kooxo bakteeriya ah oo tilmaame ah oo ah bakteeriyada loo yaqaan total coliform bakteeriya. Bakteeriyadani waa tilmaame wanaagsan oo muujinaysa in nadaafadda ceelka iyo nidaamka biyuhu ay ilaashan yihiin sababtoo ah meel kasta ayay ku jiraan oogada dhulka, laakiin inta badan ma joogaan wixii ka hooseeya dhawr dhudhun oo ciidda ah. Haddii lagu arko baaritaanka biyaha, waxay muujin kartaa in wasakheeyayaasha dhulka dushiisa sare ay galeen biyaha iyo in jeermiska cudurada keena ay ku jiraan. Sida jeermis diluhu uu u dilo inta badan nooleyaasha cudurrada keena, waxay sidoo kale dishaa bakteeriyada coliform.

Khatarta caafimaadka

Iyadoo inta badan bakteeriyada coliform aysan keenin cudur, joogitaankooda ayaa muujinaya inay ku jiri karaan jeermiska cudurada keena biyahaaga. Noolahan ili ma qabatayga ah waxay keeni karaan shuban, dhasanteriyo/shuban-biyood, salmonellosis, cagaarshow (hepatitis), iyo infakshinada mindhicirka (giardiasis). Calaamadaha waxaa ka mid ah shuban, matag, calool casiraad, lallabbo, madax-xanuun, qandho, daal iyo xitaa dhimasho mararka qaarkood. Dhallaanka, carruurta, dadka da'da ah, iyo dadka hab dhiskooda difaaca jirkoodu daciif yahay waxay aad ugu dhowdahay inay bukoonaadaan ama u dhintaan noolaha ili ma qabatayga ah ee cudurrada keena ee ku jira biyaha la cabbo.

Bakteeriyada Coliform sanad walba ha laga baaro

Tayada biyuhu way isbedeli kartaa. Waaxda Caafimaadka ee Minnesota (MDH) waxay ku talinaysaa in aad sanad walba ka baarto bakteeriyada coliform, xitaa haddii aadan ka dareemin wax isbedel ah tayada biyahaaga. MDH waxaa kale oo ay ugu talineysaa inaad ka baarto bakteeriyada coliform mar kasta oo ceelkaaga ama nidaamka biyaha laga shaqeeyo ama biyuhu isbeddelaan dhadhankoodu, urtoodu, ama muuqaalkoodu.

MDH waxay ku talinaysaa inaad isticmaasho shaybaare la aqoonsan yahay in ay baaritaan ku sameeyaan biyahaaga. La xiriir shaybaar la aqoonsan yahay si aad u hesho weel muunad lagu qaado iyo tilmaamo, ama weydiiso adeegyada deegaanka degmadaada ama caafimaadka dadweynaha in ay bixiyaan adeegyada shaybaarka. Shaybaarada La aqoonsan yahay ee Minnesota ee [Aqbala Muunadaha ay mulkiilayaashu kasoo qaadaan Ceelka Gaarka loo leeyahay \[PDF\]](#)

(www.health.state.mn.us/communities/environment/water/docs/wells/waterquality/labmap.pdf) (keliya waxaa lagu heli karaa Ingiriisi wakhtigan).

Ka baro wax badan oo ku saabsan tijaabinta biyaha ceelka [Baaritaanka Ceelka, Natiijooyinka, iyo Fursadaha](#)

Ilaali caafimaadkaaga! Ka baar biyaha ceelkaaga:



Tijaabintu waxay u sii muhiimsan tahay haddii carruurta yaryari ay cabbaan biyaha.

MDH waxa laga yaabaa inay kugula taliso inaad ka baarto wasakhooyin dheeraad ah iyadoo ku salaysan meesha aad ku nooshahay.

Ka hortaga ku wasakhowga bakteeriyada

Inta badan biyaha dhulka hoostiisa ee Minnesota ma leh jeermiska cudurada keena. Lakabyada sare ee ciidda iyo dhagaxa ayaa sifeeya biyaha marka ay galaan dhulka. Waxaad samayn kartaa waxyaabaha soo socda si aad u haysato ilaalintan dabiiciga ah:

- Hubi in ceelkaagu u **yaallo oo si habboon loo dhisay**. La shaqee qandaraasle ceel shati leh si aad tan u samayso.
- **Si joogto ah u kormeer ceelkaaga** oo hagaaji wixii jabitaan/dhaawac ah. Waxyaabaha ay tahay in aad raadiso:
 - **Burburka**: Wixii dildilaac ah ama godad ah lingaxa ceelka ku yimaada, daxalka, fiilooyinka dabacsan, ama ciidda hoos u degta?
 - **Daboolka ceelka**: si ammaan ah miyuu ugu xidhanyahay daboolku ceelka? Ma jabnyahay mise wuu ka maqan yahay?
 - **Xarkaha dabka**: marinka korantada iyo xarkaha dable ee kale miyay biyaha ka dahaaranyihiin?
 - **Ceelkaaga ku calaamadee** calamo ama astaamo si aad uga fogaato in baabuurto ku dhufato.
 - **Ka ilaali aagga ceelka qashinka**.

- **Ilaali kala fogaynta heerka ugu** yaraan inta ugu yar ee go'doominta halka ay wasakhayntu ka timaado, sida bacrimiyaha, sunta cayayaanka, hababka septic-ka, iyo meelaha quudinta xoolaha ([eeg Daryeelista/ilaalinta Ceelkaaga](http://www.health.state.mn.us/communities/environment/water/wells/construction/protect.html) (www.health.state.mn.us/communities/environment/water/wells/construction/protect.html) (kaliya waxaa lagu heli karaa Ingiriisi wakhtigan) hagitaan).
- **Ceelkaaga ha ku ag xirin xoolo.**
- Qandaraasle baara ceelasha oo shati **haysta ha daboolo ceelkaaga haddii aadan dib dambe u isticmaalaynin.** Ceelka aanad dib dambe u isticmaalaynin wuxuu keeni karaa waddo ay wasakhdu ka gasho biyaha dhulka hoostiisa ah wuxuuna khatar ku yahay badbaadada.

Ceelasha khatarta sare ku jira

Noocyada ceelasha qaarkood waxay halis sarraysa ugu jiraan inay ku wasakhoobaan noolaha ili ma qabatayga ah ee waxyeelada leh. Haddii mid ka mid ah kuwan soo socda ay run u yihiin ceelkaaga, la xiriir qandaraasle ceel oo shati si aad ugala hadasho waxa uu ikhtiyaarkaaga ugu fiican yahay.

- Ceelasha la dhisay ka hor 1974 (markii la sameeyay Xeerka Ceelasha ee Minnesota).
- Ceelasha la qoday ee leh derbiyo biyaha soo daynaya iyo leh derbiyo qurmay/gaboobay.
- Ceelasha ku yaalla hoosta hoose godadka barafowga (frost pits).
- Ceelasha godad leh daahaarka oo daxaloobay ka soo baxay.
- Ceelasha aad ugu dhow bullaacadaha, nidaamyada septic-ga, ama meelaha xoolaha lagu quudiyo ([eeg Daryeelista/ilaalinta Ceelkaaga](http://www.health.state.mn.us/communities/environment/water/wells/construction/protect.html) (www.health.state.mn.us/communities/environment/water/wells/construction/protect.html) (kaliya waxaa lagu heli karaa Ingiriisi wakhtigan) hagitaan).

Waxa ay tahay in la sameeyo haddii biyahaaga laga helo bakteeriyada Coliform

1. **Isticmaal biyo la karkariyey** ama caagadaha ah ama biyo laga keenay meelo kale oo badbaado leh si wax lagu kariyo oo la cabbo ilaa aad wax ka qabato arrinta. Haddii nitrate ama arsenik laga helay biyaha ceelka, karkarinta biyahaagu maaha doorashada ugu badbaadaba wanaagsan. Karkarinta biyaha leh wasakheeyeyaasha waxay kordhin karaan heerarkooda waxayna sababi karaan dhibaatooyin caafimaad.
2. **Ceelkaaga ku nadiifi isku** qas koloriin leh. La xiriir qandaraasle ceel oo shati leh si aad jeermiska uga disho ceelkaaga, ama isticmaal tilmaamaha ku yaal [Websaydka Nadiifinta Ceelka](http://www.health.state.mn.us/communities/environment/water/docs/wells/waterquality/disinfectionsom.pdf) (www.health.state.mn.us/communities/environment/water/docs/wells/waterquality/disinfectionsom.pdf)
3. **Mar labaad tijaabi biyaha ceelkaaga** jeermis ka dilista kadib si aad u xaqiijiso inaysan ku jirin bakteeriyada coliform.
4. Waxaad mar labaad isticmaali kartaa biyaha, adiga oo aan karkarin, marka ceelka la nadiifiyo oo biyuhu aysan mar dambe laga helin bakteeriyada coliform.

Waxa la sameeyo haddii Dhammaan isku dayada ka nadiifinta jeermiska lagu guuldareysto

Mararka qaarkood nadiifinta/jeermis ka dilista oo keliya kuma filnaan doonto xallinta arrinta. Xaaladani marka ay jirto, la shaqee qandaraasle ceel oo shati leh si aad u ogaato waxa ay tahay

in la sameeyo. Waxaa laga yaabaa inaad qaado tallaabooyin gaar ah, sida inaad ka soo gurto waxyaabaha burburka haraaga ah ceelka ama in aad godaan ceel cusub. Sababaha suurtagalka ah waa:

- Xoolo yaryar ama qashin ayaa ceelka galay.
- Afaafka ama dildilaac ayaa ka soo baxay qaybta sare ee afka ceelka.
- Carrada iyo dhagaxaanta ayaa waxaa laga yaabaa in ayna si ku filan u shaandhaynin biyaha, oo biyaha dhulka dushiisa ayaa waxaa laga yaabaa in ay si qoro dheer u sii gelayaan dhulka.

Biyaha ceelkayga miyaan ka baaraa wax aan ahayn Bakteeriyada Coliform?

Haa. Ilaha dabiiciga ah iyo hawlaha bani'aadamka labaduba waxay wasakhayn karaan biyaha ceelka waxayna sababi karaan saamayn caafimaad oo muddo gaaban ama mid dheer. Tijaabinta biyaha ceelkaagu waa habka kaliya ee loogu ogaan karo inta badan wasakhooyinka caadiga ah ee ku jira biyaha dhulka hoose ee Minnesota; ma dhadhamin kartid, ma arki kartid, mana urin kartid inta badan wasakheeyeyaasha. Waaxda Caafimaadka ee Minnesota waxay ku talinaysaa in laga baaro:

- **Nitrate in laga baaro sanad walba.** Dhallaanka dhalada lagu quudiyo ee ka yar lix bilood waxay halis ugu jiraan inay saameeyaan heerarka nitrate-ka ee ka sarreeya 10 milligaraam litirkii ee ku jira biyaha la cabbo.
Ka eeg Nitrite ku jirta Biyaha Ceelka
(www.health.state.mn.us/communities/environment/water/docs/wells/waterquality/nitratesom.pdf).
- **Arsenik ugu yaraan hal mar.** Qiyaastii 40 boqolkiiba ceelasha Minnesota waxaa biyaha ku jira arsenik. Cabitaanka biyaha leh arsenik muddo dheer waxay gacan ka geysan karaan hoos u dhaca garaadka carruurta iyo kordhinta khatarta kansarka, sonkorowga, cudurrada wadnaha, iyo dhibaatooyinka maqaarka ee dadka waaweyn.
Eeg Arsenik ku jirta Biyaha Ceelka
(www.health.state.mn.us/communities/environment/water/docs/wells/waterquality/arsenicson.pdf).
- **Macdanta Lead ugu yaraan hal mar.** Ceelka iyo nidaamka biyuhu waxay yeelan karaan qaybo ay ku jiraan liidh/sunta rasaastu, oo liidh/sunta rasaastu waxay geli kartaa biyaha la cabbo. Sunta rasaastu waxay dhaawici kartaa maskaxda, kelyaha, iyo habdhiska dareenka. Sunta rasaastu waxa kale oo ay hoos u dhigi kartaa korriinka ama waxa ay sababi kartaa dhibaatooyinka waxbarashada, hab dhaqanka, iyo maqalka.
Ka eeg Liidhka/Sunta Rasaasta ee ku jirta Biyaha Ceelka
(www.health.state.mn.us/communities/environment/water/docs/wells/waterquality/leadsom.pdf).
- **Manganiis ka hor inta uusan ilmuhu cabin biyaha.** Heerarka sareeya ee manganiis ayaa waxay sababi karaan dhibaatooyinka dhanka xusuusta, dareenka, iyo xirfadaha dhaqdhaqaaqa muruqyada. Waxaa kale oo ay dhallaanka iyo carruurta u keeni kartaa dhibaatooyinka waxbarashada iyo hab dhaqanka.
Ka eeg Manganiis-ka ku jirta Biyaha la cabbo

(www.health.state.mn.us/communities/environment/water/contaminants/manganese.html) (kaliya waxaa lagu heli karaa Ingiriisi wakhtigan).

Wasakheeyayaasha kale ayaa mararka qaarkood ku jira goobaha biyaha ee gaarka loo leeyahay, laakiin in ka yar wasakheeyayaasha kor ku taxan. Tixgeli in aad ka baartaan:

- **Isku-dhafka Kiimikooyinka Dabiiciga ah ee Sida Fudud Hawada u Raaca** haddii ceelku u dhow yahay haamaha shidaalka ama goob ganacsi ama warshadeed.
- **Kiimikooyinka beeraha ee sida caadiga ah looga isticmaalo aagga** haddii ceelku gaaban yahay oo u dhow yahay beeraha laga beero dalaga ama meelaha lagu maamulo kiimikooyinka beeraha ama uu ku yaal aagga juqraafiga nugul (sida dhagax nuuradeed jajaban).
- **Fluoride** haddii carruurta ama dhallinyaradu ay cabbaan biyaha.

Si aad macluumaadkan ugu hesho qaab kale, soo wac 651-201-4600.
Publications\Bacterial Safety of Well Water 06/15/2023 - Somali