

Macdanta Manganese oo ku jirtaa Biyaha la Cabo

Macdanta Manganese waxay si dabiici ah ugu dhalataa dhamaan dhagaxyada iyo ciidda Minnesota waxaana inta badan laga helaa dhulka Minnesota iyo biyaha fadhiya dhulka dushiisa. Jirkaagu wuxuu u baahan yahay xoogaa macdanta manganese ah si uu caafimaad qab u helo, laakiin wax aad u badan haddii uu jirkaagu qaato dhibaato ayey geysan kartaa.

Saamaynta Caafimaadka

Carruurta iyo dadka waaweyn ee cabba biyaha leh heerar sare oo macdanta manganese ka ah muddo dheer waxaa laga yaabaa in ay soo gaaraan dhibaatooyin lan xirira xusuusta, dareenka, iyo habka dhaqdhaqaaqa xubnaha. Dhallaanka (carruurta da'doodu ka yar tahay hal sano) waxaa laga yaabaa in ay ku dhacdo dhibaatooyin xagga waxbarashada iyo hab dhaqanka la xiriira haddii ay cabbaan biyo ay ku jiraan manganese badan.

Sida Naftaada & tan Qoyskaagaba Loo Ilaaliyo Family

Waaxda Caafimaadka ee Minnesota (Minnesota Department of Health [MDH]) waxay soo saartay hagitaano qiimo leh si loo ilaaliyo biyaha guryaha lagu cabbo. Maadaama ay hagitaanadaan qiimaha lehi ay yihiin soo jeedin uun, nidaamyada biyaha dadweynaha qasab kuma aha in ay buuxiyaan hagitaanadaan, marka qaarkood ma sameeyaan.

- Haddii aad leedahay ilmo yar oo cabba biyaha tuubada ama cabba caanaha lagu qasay biyaha tuubada, heerka badbaadada leh ee macdanta manganese ka ah ee biyaha ku jirta waa in ay tahay 100 microgram oo manganese ah halkii liitar oo biyo ah ($\mu\text{g/L}$)* ama ka yar.
- Haddii aad leedahay ilmo yar oo aan waligii cabbin biyaha tuubada ama caano lagu qasay biyaha tuubada, heerka badbaadada leh ee macdanta manganese ka ah ee biyaha ku jirta waa in ay tahay 300 $\mu\text{g/L}$ ama ka yar.
- Haddii qof kasta oo qoyskaaga ka mid ah ay da'diisu ka weyn tahay hal sano, heerka badbaadada leh ee macdanta manganese ka ah ee biyaha ku jirta waa in ay tahay 300 $\mu\text{g/L}$ ama ka yar.

xadka ay dejisay hagida MDH waxay waxyeelo u keeni karaan caafimaadkaaga laakiin qubayska biyaha la dhexgalayo (bath) ama qubayska caadiga ah dhib ma laha. Macdanta manganese ee ku jirta biyahaaga waxay wasakhayn kartaa dharkaaga, waxay qolfo u yeeli kartaa tuubooyinka biyuhu maraan ee guriga, waxayna u yeeli kartaa biyahaaga muuqaal, ur, ama dhadhan xun. Macdanta manganese waxa kale oo ay u yeeli kartaa suuligaaga/musqushaada, saxanka qubeyska, ama saxankaaga weji-dhaqqa midab baroon ah ama midab madow.

Sida kaliya ee aad ku ogaan karto heerka macdanta manganese-ka ee biyahaaga la cabbo ku jirta waa in aad la xiriirto nidaamkaaga biyaha dadweynaha ama waa in tijaabo laga qaado biyaha tuubadaada. Dhammaan baaritaanka biyaha waa in laga sameeyaa shaybaar la aqoonsan yahay. La xiriir shaybaar la aqoonsan yahay si aad u hesho weel saamiga biyaha la baarayo lagu qaado iyo tilmaamaha ama weydii degmadaada adeegyada deegaanka ama faydhoorka caafimaadka dadweynaha haddii ay sameeyaan adeegyada baarista biyaha (eeg *Raadinta Shaybaarada La aqoonsan yahay*).

Haddii aad leedahay qalabka sifeynta biyaha ee qoyska, waxa laga yaabaa in qalabku uu hoos u dhigo heerka manganese ee biyahaaga la cabbo ku jirta (eeg Qalabka Sifeynta Biyaha Guriga: Aaladaha Isticmaalka goobta (Home Water Treatment Units: Point-of-Use Devices) wixii Macluumaad dheeraad ah). MDH iyo Degmada Dakota waxay sameeyeen daraasad sanadkii 2016 waxayna ogaadeen in biyo jilcinta ay noqon karaan hab wax ku ool ah oo lagu dhimo heerka macdanta manganese-ka ee biyaha la cabbo ku jirta (eeg Cilmi-baarista Ceelasha iyo Kororka Dareenka Dhallaanka iyo Saameynta (The Wells and Increased Infant Sensitivity and Exposure [WIISE])).

*Hal mikrogram liitirkiiba ($\mu\text{g/L}$) waxuu la mid yahay 1 bilyan qeybood.

Cabitaanka biyo leh heerka manganese ee ka sarreeya

Haddii aad leedahay ceel gaar ah

Biyaha hoose ee Minnesota qaarkood ayaa si dabiici ah u leh heerar manganese ah oo ka sarreeya qadarka uu tilmaamayo hagaha MDH. Waxaa laga yaabaa in aad rabto in aad ka tijaabiso biyaha aad cabtaan manganese, gaar ahaan haddii dhallaanka ay cabbaan biyaha tuubadaada. Adiga ayaa mas'uul ka ah in aad ilaaliso biyaha ceelkaaga oo aad baaritaan ugu sameyso sida loogu baahan yahay.

Haddii aad isticmaasho nidaamka biyaha dadweynaha

Nidaamyada biyaha dadweynaha waxaa laga yaabaa in ay ka baaraan biyahooda macdanta manganese, laakiin qasab kuma aha in ay baaraan. Waxaad la xirii kartaa nidaamka biyaha dadweynaha ee magaaladaada si aad u ogaato in ay biyaha ka baaraan macdanta manganese. Haddii nidaamkaaga biyaha dadwaynuhu aanu ka baarin biyaha macadanta manganese, waxaad raadsan kartaa adiga oo lacagta iska bixinaya shaybaar la aqoonsan yahay si loo baaro biyahaaga. Xusuusnow in noocyo ka mid ah qalabka daaweynta ee sifeeya biyaha guriga ay ka dhigi karaan heerka manganese ka mid ka hooseeya biyaha tuubadaada marka loo eego waxa nidaamka biyuhu ogaaday.

Xogta Aassaasiga ah

Macdanta manganese waxay si dabiici ah ugu dhalataa dhagaxyada iyo ciidda waxaana lagu heli/arki karaa biyaha, cuntada, iyo hawada. Jirkaagu wuxuu u baahan yahay wax-xoogaa manganese ah si uu u ahaado mid caafimaad qaba. Qadarka lagu talinayo in laga qaato maalin kasta waxay kuxiran tahay da'da qofka iyo jinsiga. Qaashada macdanta manganese ee lagu talinayo in ay qaataan carruurta ka weyn da'da siddeed sano jirka iyo dadka waaweyn wey kala duwan tahay waxayna u dhexeysaa 1,900 ilaa 2,600 µg maalintii. Dhallaanka waa inay qaataan 600 µg ama ka yar of manganese per day.

Heerka manganese-ku uu faa'iido ka helayo qof wuxuu noqon karaa heer qof kale waxyeello gaarsiinaya. Dadka waaweyn iyo carruurta waxay manganese ku filan ka helaan cuntadooda. Dhallaanku waxay ka helaan manganese ku filan caanaha naaska hooyada, cuntada,

ama caanaha budada la qasay ah. Cuntadu sida badan waxay leedahay heer manganese oo ka sarreeya kan biyaha ku jira; hase yeeshee, waxaa jira noocyo badan oo cuntado ah oo runtii xannibi kara manganese inuu galo jirka. Biyuhu ma laha astaamahaas cuntadu leedahay wax la mid ah, marka jirkaagu wuxuu si fudud u qaadan karaa manganese-ka biyaha ku jira.

Manganese-ka ku jira Biyaha Minnesota

Manganese -ku wuxuu si dabiici ah ugu jiraa biyaha dhulka hoostiisa ah ee Minnesota oo dhan. Iyada oo tixraacayo daraasadda MDH, biyaha dhulka hoostiisa ah ee koonfur-bari Minnesota waxay u badan tahay inay leeyihiin heerar hoose oo manganese ah (ka hooseeya 50 µg/L). Koonfur-galbeed Minnesota waxay u badan tahay inay leeyihiin heerar sare—qaar baa ka badan 1,000 µg/L. Ma jiraan qaabab siman oo ka jira qaybaha kale ee gobolka.

Inkasta oo hababka biyaha dadwaynaha aan looga baahnayn in laga baaro manganese, qaar ka mid ah nidaamyada biyaha bulshada ee Minnesota ayaa baara manganese-ka kahor ama ka dib marka biya la sifeeyo. Iyada oo lagu saleynayo natiijooyinka baaritaanka iyo hab-dhaqanka daawaynta, MDH waxay ku qiyaastay in boqolkiiba 90 dadka reer Minnesota ee isticmaalaya nidaamyada biyaha la cabbo in ay helaan biyo leh heerar manganese ah oo ka hooseeya 100 µg/L. Qiyaastiiboqolkiiba 3 dadka reer Minnesota ee nidaamka biyaha dadweynaha caba waxay helaan biyo leh heerar ka sarreeya 300 µg/L. Waxaa muhiim ah in la xasuusto noocyada qaar ka mid ah qalabka biyo sifeynta daaweynta ee guriga in ay hoos u dhigi karaan manganese oo gaarsiyaan heerar nabdoon.

Waxa ay MDH qabanayso

MDH waxay haysaa hagitaan ku salaysan caafimaadka manganese biyaha ku jira (eeg *Human Health-Based Water Guidance Table [Jadwalka Hagida Biyaha ee Ku Salaysan Caafimaadka Aadaha]*). MDH waxay ururisay xog si ay u hesho qaababka manganese-ku ugu abuurmo/galo biyaha dhulka hoostiisa ee Minnesota (eeg *Manganese in Minnesota Groundwater [Qiimaynta Hordhaca ah ee Manganese ee Biyaha Dhulka ku jira ee Minnesota]*). *Groundwater*). MDH waxay sidoo kale ka qayb qaadatay dadaal ay sameeyeen Ururka Biyaha

Dhulka ee Minnesota (Minnesota Ground Water Association) si ay u sameeyaan warbixin ku saabsan manganese oo loogu macag daray yiraahdo *Manganese in Minnesota's Groundwaters (Manganese ku jira Biyaha dhulka ku jira ee Minnesota's)*.

Maxay Kooxaha Kale Sameynayaan?

Cilmi-baarayaal ka tirsan Jaamacadda Minnesota ayaa helay maalgelin si ay u baaritaan ugu sameeyaan Khatarta dhalaanka ka soo gaari karta Manganese-ka Biyaha La-cabbidda ku jirta.

Ilaha

- [Home Water Treatment \(Hoyga Sifeynta Biyaha\) \(www.health.state.mn.us/communities/environment/water/factsheet/hometreatment\)](http://www.health.state.mn.us/communities/environment/water/factsheet/hometreatment)
- [Human Health-Based water Guidance Table \(Shaxda Hanuuninta Biyaha ee Ku Salaysan Caafimaadka Aadamiga\) \(https://www.health.state.mn.us/communities/environment/risk/guidance/gw/table.html\)](https://www.health.state.mn.us/communities/environment/risk/guidance/gw/table.html)
- [Initial Assessment of Manganese in Minnesota \(Qiimaynta hore ee Manganese ee Minnesota\) Groundwater \(PDF\) \(www.health.state.mn.us/communities/environment/water/docs/swp/mnreport.pdf\)](http://www.health.state.mn.us/communities/environment/water/docs/swp/mnreport.pdf)
- [Manganese in Minnesota's Groundwaters \(PDF\)\(Manganese-ka ku jira Biyaha Dhulka ee Minnesota\) \(www.mgwa.org/documents/whitepapers/01_manganese/Manganese_in_Minnesotas_Groundwaters.pdf\)](http://www.mgwa.org/documents/whitepapers/01_manganese/Manganese_in_Minnesotas_Groundwaters.pdf)
- [Risks to infants from managanese in drinking water \(Khatarta dhallaanka uga imanaysa managanese ee biyaha la cabbo\) \(https://consortium.umn.edu/risks-infants-manganese-drinking-water\)](https://consortium.umn.edu/risks-infants-manganese-drinking-water)
- [Search for Accredited Laboratories \(Raadi Shaybaadhada La aqoonsan yahay\) \(www.health.state.mn.us/labsearch\)](http://www.health.state.mn.us/labsearch)
- [The Wells and Increased Infant Sensitivity and](#)

[Exposure \(WIISE\) Study \(PDF\) \(Cilmi-baarista Ceelasha iyo Kororka Dareenka Dhallaanka iyo Saameynta\) \(www.health.state.mn.us/communities/environment/risk/docs/studies/wiisereport.pdf\)](#)

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Si aad xogtan ugu hesho qaab sidan ka duwan, wac: 651-201-4700.