

SHINIKIZO LA DAMU: KUPUNGUZA SHINIKIZO

(Chpt 3-Hypertension)

UHABA WA MAJI KITAIFA

“BRENDA!” Mama yangu mwenye umri wa miaka themanini na tatu alinipigia simu wiki iliyopita. Sauti yake ilisikika ikiwa na hofu: “Nimepima shinikizo langu la damu na nina wasiwasi; ni 160/100.”

Brenda pia alikuwa na wasiwasi, lakini alijua jambo fulani kuhusu shinikizo la damu. “Mama, kaa chini tu, kunywa glasi tatu kubwa za maji, nami nitakuja baada ya dakika 45 hivi, kisha tutapima tena shinikizo lako la damu.”

Baada ya kufika dakika 45 baadaye, Brenda alipima tena shinikizo la damu la mama yake; sasa lilikuwa 130/70.

Wamarekani wanaishi katika hali ya upungufu wa maji mwilini kwa muda mrefu. Watu wanaokunywa maji mengi huwa na shinikizo la damu la chini.¹ Watu wengi wanateseka kutokana na shinikizo la damu, ambalo chanzo chake ni kutokunywa maji ya kutosha. Upungufu wa maji wa kudumu huulazimisha mwili kubana mishipa ya damu na kuharakisha mapigo ya moyo ili kudumisha mtiririko wa kutosha wa damu kwenda kwenye ubongo; baada ya muda, hali hii husababisha shinikizo la damu.²

Si kila shinikizo la damu husababishwa na kutokunywa maji ya kutosha, lakini sehemu kubwa zaidi ya visa vyake hutokana na sababu hii kuliko inavyotambuliwa.

Linganisha athari ya “uhaba huu wa maji kitaifa” na miongozo ya Taasisi ya Kitaifa ya Afya (NIH) kuhusu matibabu ya shinikizo la damu.³

Kwa mfano, tuseme matumizi yako ya maji yamekuwa duni sana na ubongo wako unahitaji usambazaji bora wa damu. Mwili hujibu kwa kuongeza kasi ya mapigo ya moyo na kubana mishipa ya damu ili kusukuma damu kwa ufanisi zaidi kuelekea juu ya kichwa chako.⁴

Daktari anapima shinikizo lako la damu na, bila shaka, anakuta ni kubwa kuliko kiwango kinachochukuliwa kuwa salama. Kwa kufuata miongozo ya kitabibu, matibabu ya kwanza yanaweza kuwa dawa ya kuondoa maji mwilini “kidonge cha maji,” yaani diuretic. Unaenda nyumbani, upungufu wa maji mwilini unakuwa mbaya zaidi, na katika ziara inayofuata kwa daktari anakuta bado una shinikizo la damu, na pia mapigo ya moyo yameongezeka.

Miongozo sasa inapendekeza beta-blocker. Beta-blocker hufanya nini? Hupunguza kasi ya mapigo ya moyo. Kwa hiyo unaenda nyumbani; moyo wako sasa unapiga polepole, lakini ubongo bado unahitaji damu, hivyo mishipa yote ya damu mwilini inazidi kubana ili kusukuma damu iliyobaki kuelekea juu ya kichwa.

Unarudi tena kwa daktari kwa ufuatiliaji; kumbe shinikizo bado liko juu. Kidonge kinachofuata kinachopendekezwa kwa “shinikizo la damu linalokataa kushuka” ni calcium-channel blocker. Kinafanya nini? Hulegeza mishipa yote ya damu. Unamaanisha ile mishipa iliyobana ili kupeleka damu juu ya kichwa? Ndiyo.

Ni lazima nikubali kwamba NIH inapendekeza mabadiliko ya mtindo wa maisha kama tiba ya kwanza, lakini kwa maoni yangu, mabadiliko hayo na kiwango ambacho yanatekelezwa au

kuhamasishwa hayapati msisitizo wa kutosha. Kwa hiyo, labda unaweza kuona kwamba mimi si “mshabiki mkubwa” wa kutibu magonjwa yanayotokana na mtindo mbaya wa maisha kwa kitu kingine badala ya kurekebisha mtindo huo wa maisha.

Okoa Ubongo

Watu wenye shinikizo la damu la kawaida huishi muda mrefu zaidi.^{5,6,7} Zaidi ya hayo, uwezo wao wa kufikiri huwa bora zaidi. Katika kuchunguza akili za watu wenye shinikizo la damu, watafiti wamegundua uhusiano kati ya shinikizo la damu, kasoro katika white matter ya ubongo, na ugumu wa kufikiri na kukumbuka.⁸

Watu wenye shinikizo la damu hupata vidonda vya white matter katika ubongo kwa kiwango mara 10 zaidi kuliko watu wa kawaida.⁹ Kudhibiti shinikizo la damu kwa kutumia dawa hakuzui kuzorota kwa ubongo. Baadhi ya dawa za shinikizo la damu zinaweza hata kufanya ubongo uzorote kwa kasi zaidi.¹⁰ Ili kuzuia kuzorota kwa ubongo, tabia za mtindo wa maisha zinazohusika katika shinikizo la damu na dementia zinapaswa kushughulikiwa.

“Dawa” za Miujiza Zilizo Salama?

Baadhi ya watu hukimbilia tiba mbadala wakitafuta dawa ya miujiza ya kurekebisha magonjwa yanayohusiana na mtindo wa maisha, wakifikiri watapata tiba salama zaidi katika virutubisho, mimea au vitamini.

Baadhi ya vidonge hivi vya kununua bila dawa vina viambato vinavyofanya kazi kifamasia kama dawa za hospitalini. Lakini je, kuna mantiki kutumia dawa za miujiza kutibu ugonjwa huku ukiendelea kufanya tabia zilezile za maisha zilizosababisha ugonjwa huo?

Si kwamba watu hawajapata manufaa kutokana na baadhi ya vidonge hivi. Vitu ambavyo vimeonyesha ushahidi fulani wa manufaa ni pamoja na coenzyme Q10, mafuta ya samaki, kitunguu saumu, vitamini C, L-arginine¹¹, dondoo la mbegu za zabibu,¹² quercetin¹³,¹⁴ rosemary¹⁵, cranberry¹⁶, fennel¹⁷, mistletoe^{18,19}, saffron²⁰, hawthorn berry²¹, na valerian²²

Lakini hakuna hata kimoja kati ya vidonge hivi kinachobadilisha sababu au chanzo cha kwa nini shinikizo lako la damu lilipanda hapo kwanza.

HAKUNA BADALA

Sipingi vidonge kwa sababu tu ni vidonge, lakini baadhi ya vidonge hivi vinaweza kuwa na madhara makubwa. Kwa mfano, watu ambao tayari wanatumia dawa za shinikizo la damu hujibu kwa kiwango kidogo zaidi kwa mabadiliko ya mtindo wa maisha.²³ Kwa namna fulani huwa wamekwama. Zaidi ya hayo, ugonjwa wa Parkinson umetajwa kuwa athari ya baadhi ya dawa za shinikizo la damu.²⁴

Vipi kuhusu Alzheimer? Watu wenye shinikizo la damu la chini hadi la kawaida hulindwa dhidi ya magonjwa ya ubongo kama Alzheimer²⁵ Kushusha shinikizo la damu kwa njia ya dawa hakuzui kila mara maendeleo ya dementia.²⁶ Watu ambao mtindo wao mzuri wa maisha huwapa shinikizo la damu lenye afya wana uwezekano mkubwa wa kubaki na uwezo mzuri wa akili wanapozeeka.²⁷ Ninapendekeza kufanya mtindo mzuri wa maisha kuwa kinga yako dhidi ya dementia, badala ya kutegemea dawa. Ingawa dawa kwa kawaida hupewa kushughulikia ugonjwa ambao mgonjwa anao, shinikizo la damu lenyewe linaweza kuwa athari ya dawa nyingi.

Vidonge vya kuzuia mimba huongeza shinikizo la damu kwa wastani wa pointi 8.^{28, 29} Matumizi ya dawa za kutibu depression yamehusishwa na ongezeko mara mbili la hatari ya shinikizo la

damu.³⁰ Dawa za kuzuia uvimbe zinaweza kusababisha shinikizo la damu kupitia kuharibika kwa utendaji wa figo.^{31, 32, 33} Acetaminophen (pia huitwa Tylenol) huongeza shinikizo la damu,³⁴ hasa kwa wagonjwa wenye ugonjwa wa mishipa ya moyo.³⁵

SHINIKIZO LA DAMU NI NINI?

Shinikizo la damu ni nini? Natonal Institutes of Health (NIH) inaeleza wazi uainishaji wa shinikizo la damu. Shinikizo la damu huandikwa kama shinikizo la systolic juu ya shinikizo la diastolic. Systolic ni kipimo cha shinikizo la juu zaidi ambalo moyo hutengeneza wakati unapiga. Diastolic ni shinikizo la chini zaidi wakati moyo unajazwa tena damu kwa ajili ya mpigo unaofuata.

Shinikizo la kawaida la damu halizidi kawaida ya 120/80mmHg. Shinikizo linalozidi 120/80 lakini lisilozidi 139/89 kilitwa huitwa Shinikizo la damu la awali. Shinikizo la damu zaidi ya 139/89 huanishwa katika hatua mbili: hatua ya kwanza ni 140–159/90–99, na kiwango cha 160/100 huchukuliwa kuwa shinikizo la damu hatua ya pili. Kadiri shinikizo lako la damu linavyokuwa juu, ndivyo uwezekano wako wa kupata matatizo mengine yanayoweza kuhatarisha maisha kutokana na shinikizo la damu unavyoongezeka. Watu ambao mtindo wao mzuri wa maisha huwapa shinikizo la damu lenye afya wana uwezekano mkubwa wa kubaki na uwezo mzuri wa akili kuwa makini na wenye uwezo wa kufikiri wanapozeeka.

ATHARI DUNIANI

Shinikizo la damu linaathiri takribani watu milioni 50 nchini Marekani na watu bilioni 1 duniani kote. [3] Takribani asilimia 29 ya watu wazima nchini Marekani wana shinikizo la damu; karibu asilimia 68 wanatumia dawa za kulidhibiti, lakini ni asilimia 64 tu ya wanaotumia dawa wana shinikizo la damu lililodhibitiwa. [36] Watu 9 kati ya 10 wenye umri wa miaka 55 nchini Marekani ambao wana shinikizo la kawaida la damu watapata shinikizo la damu kabla ya kufa.[3]

AINA ZA SHINIKIZO LA DAMU

Kuna aina mbili kuu za shinikizo la damu: **primary** na **secondary**. [37]

Shinikizo la damu la primary kwa kawaida huchukuliwa kuwa na chanzo kisichojulikana, lakini unapoendelea kujifunza kuhusu shinikizo la damu utaona kwamba shinikizo nyingi za primary huhusishwa na mtindo wa maisha—husababishwa na tabia zetu kuhusu kula, kunywa na kufanya mazoezi.

Shinikizo la damu la secondary linaweza kuhusishwa na magonjwa mengine kama ugonjwa wa tezi ya thyroid, ugonjwa wa figo, ugonjwa wa parathyroid, metabolic syndrome (kisukari), n.k.

“MUUJI WA KIMYA”

Shinikizo la damu huitwa “muuji kimya” kwa sababu watu wengi wenye shinikizo la damu hawajui kwamba wanalalo. Hata hivyo, baadhi ya watu wenye shinikizo la damu huripoti dalili kama uchovu, joto la ghafla mwilini, maumivu ya kichwa, kupungua kwa nguvu, mapigo ya moyo kwenda mbio au kuhisi mapigo ya moyo, kutokwa jasho ghafla, kupungua kwa uwezo wa kufanya shughuli za kimwili, kizunguzungu, kupumua kwa shida, maumivu ya kifua, usingizi, kuona ukungu, tinnitus (mlio masikioni), na/au mvutano wa misuli. [38]

KUWA MAKINI NA ISHARA ZA HATARI YA MAGONJWA YA MOYO NA MISHIPA

Shinikizo la damu huenda lisiwe tatizo kubwa kama lisingesababisha magonjwa mengine mengi. Miongoni mwa hayo, ugonjwa wa moyo unaongoza. Kufikia shinikizo la damu la kawaida hupunguza hatari ya congestive heart failure kwa asilimia 36, [39] ugonjwa wa moyo wa coronary kwa asilimia 72, na mshtuko wa moyo kwa asilimia 75%. [40] Kwa sababu shinikizo la damu huuweka moyo chini ya mzigo mkubwa, kupunguza shinikizo kwa pointi 20 tu kunaweza kupunguza hatari ya ugonjwa wa moyo kwa nusu. [3] Watafiti wamegundua kwamba kupunguza wastani wa shinikizo la damu nchini Marekani kwa pointi 5 tu kungeweza kupunguza vifo vya kiharusi kwa 23,000 kwa mwaka. [41] Zaidi ya hayo, kushusha shinikizo kutoka 140/90 hadi karibu na kawaida ya 120/75 hupunguza hatari ya kiharusi kwa asilimia 74. [42]

Kutokwa damu ni sababu ya kawaida ya kiharusi na kunaweza kutokea aneurysm inapopasuka katika ubongo. Ikiwa shinikizo la damu litawekwa ndani ya viwango vya kawaida, aneurysm za ubongo zina uwezekano mdogo zaidi wa kukua na kupasuka. [43]

Utafiti mwingine uliripoti kwamba kuleta shinikizo la damu katika hali ya kawaida kunaweza kupunguza kiharusi kwa asilimia 35–40, myocardial infarction kwa asilimia 20–25, na heart failure kwa zaidi ya asilimia 50. [44] Kudhibiti shinikizo la damu pia hupunguza hatari ya peripheral vascular disease—uharibifu wa mishipa ya damu katika mikono na miguu ambao unaweza kusababisha ulemavu wa kimwili. [45]

KUONGEZA JERAHA JUU YA JERAHA

Shinikizo la damu linaweza kuharibu sehemu yoyote ya mwili kwa sababu kila sehemu ya mwili inategemea damu kwa ajili ya uhai.

Watu wenye shinikizo la kawaida la damu wanaweza kuepuka sababu ya pili kwa ukubwa—baada ya kisukari—ya kushindwa kufanya kazi kwa figo. [46] Madhara ya kushangaza ya shinikizo la damu ni ongezeko la hatari ya saratani! Kwa mfano, shinikizo la kawaida la damu hupunguza hatari ya saratani ya endometrial kwa asilimia 70. [47]

Je, unakumbuka namba zako za mwisho za shinikizo la damu? Je, una ugumu wa kufikiri na kukumbuka?

Watu wenye shinikizo la damu wana uwezekano mkubwa wa kupata Alzheimer katika miaka yao ya baadaye, ugonjwa wa ubongo unaoathiri uwezo wa kufikiri na kukumbuka.

Watu wenye shinikizo la kawaida la damu wana mtiririko bora zaidi wa damu kwenda kwenye ubongo, jambo linaloboresha kufikiri na kumbukumbu. [48] [49] Shinikizo la kawaida la damu hulinda ubongo dhidi ya kuzorota, hasa katika frontal lobes. [50]

Watu wasio na shinikizo la damu hufanya vizuri zaidi katika vipimo vya kumbukumbu, umakini na uwezo wa kufikiri kwa njia ya dhahania. [51] Shinikizo la kawaida la damu linaweza kupunguza hatari ya Alzheimer kwa asilimia 40. [52]. Kisukari na shinikizo la damu mara nyingi huhusiana kwa karibu. Vinapounganishwa na HDL cholesterol ya chini, triglycerides nyingi na unene wa kati ya mwili, hupewa jina la syndrome X. [53] Syndrome X si utambuzi mzuri kuwa nao, lakini hatua za kubadilisha mtindo wa maisha ndizo zenye ufanisi zaidi katika kushughulikia hali hii. **Osteoporosis** ni hali ya mifupa kuwa myembamba na hivyo kuongeza hatari ya kuvunjika. Watu wenye shinikizo la kawaida la damu wana hatari ya osteoporosis iliyo karibu theluthi moja ya ile ya watu wenye shinikizo la damu. [54] **Retinopathy** na macular degeneration ni sababu kuu

za upofu. Kudumisha shinikizo la damu katika viwango vya kawaida hupunguza kwa nusu hatari ya upofu kutokana na retinopathy na/au macular degeneration. [55]

Erectile dysfunction: tatizo katika utendaji wa tendo la ndoa. Asilimia 32 zaidi ya wanaume wenye shinikizo la kawaida la damu wana uwezo wa kupata na kudumisha uume kusimama kuliko wanaume wenye shinikizo la damu. [56]

TUNAELEKEA WAPI SASA?

Shinikizo la damu hutokana na kusukuma kwa moyo, ukubwa wa mishipa ya damu, unene wa damu na kiasi cha damu.

Moyo unapopiga kwa kasi zaidi, damu nyingi zaidi husukumwa na shinikizo huongezeka. Hali hii huitwa **tachycardia**.

Mishipa ya damu inapobana, nafasi ya damu kupita huwa ndogo, hivyo huhitaji shinikizo kubwa zaidi ili kupitisha kiwango kilekile cha damu. Kubana huku huitwa **vasoconstriction**.

Mishipa ya damu kwa kawaida hupanuka na kulegea kwa kila mpigo wa moyo. Ikiwa mishipa inakuwa migumu, ugumu wake huzuia mtiririko huru wa damu kwa kila mpigo, na shinikizo huongezeka. Atherosclerosis ni mfano wa mchakato huu. Ikiwa damu inakuwa nzito na yenye kunata, shinikizo kubwa zaidi huhitajika kuisukuma kupitia mishipa ya damu, na shinikizo la damu huanza. Tunaposema damu imekuwa nzito, tunamaanisha kwamba viscosity yake imeongezeka kupita kiasi. Hatimaye, ikiwa mishipa ya damu inabanwa na kitu kutoka nje, athari yake ni kama kuweka kidole gumba mwisho wa bomba la bustani; shinikizo la damu huongezeka. Hii huitwa **external compression**.

Ikiwa kiasi cha damu kinaongezeka, damu nyingi zaidi huingia moyoni; moyo nao husukuma damu nyingi zaidi kwa kila mpigo, na hivyo kuongeza shinikizo la damu. Hali hii mara nyingi huitwa **fluid retention**.

MZIGO MKUBWA WA KIMIMINIKA!

Tuanze kwa kuzungumzia tatizo la kuongezeka kwa kiasi cha damu.

Kuongezeka kwa kiasi cha damu kunaweza kutokana na unene kupita kiasi, kwa sababu tishu nyingi za mafuta huhitaji damu zaidi.

Chumvi husababisha mwili kuhifadhi maji, na hivyo kuleta mzigo mkubwa wa maji.

Mzigo huu hutokea pia figo zinaposhindwa kufanya kazi vizuri, kwa sababu figo ndizo zinazohusika na kuondoa maji ya ziada mwilini.

Misuli ina mishipa mingi mikubwa ya damu na huhitaji damu nyingi inapofanya mazoezi. Misuli mikubwa isiyotumika huwa migumu na mishipa yake huwa migumu, hivyo kupinga mtiririko wa damu na kusababisha mzigo kwenye moyo. Kwa hiyo, kutofanya shughuli za mwili husababisha shinikizo la damu.

Damu haipendi baridi (wewe si mnyama mwenye damu baridi), na ikiwa miguu au mikono yako ni baridi, mishipa ya damu katika maeneo hayo hubana, na damu yote kuelekezwa moyoni, hivyo kuulemea na kusababisha shinikizo la damu. [57]

MATUMIZI YA SODIUM NCHINI MAREKANI YANAZIDI MIONGOZO YA LISHE

Ni ukweli unaojulikana kwamba chumvi ya chakula ina mchango mkubwa katika maendeleo ya shinikizo la damu. Chumvi huufanya mwili uhifadhi maji ya ziada, na hivyo kuleta mzigo mkubwa

wa maji moyoni na hatimaye shinikizo la damu. Inakadiriwa kwamba kupunguza matumizi ya sodium nchini Marekani hadi 1300 mg kwa siku (takribani nusu kijiko cha chai cha chumvi) kungepunguza kiwango cha vifo vya kila mwaka kwa 150,000. [58] Mapendekezo yetu ni kwamba matumizi ya jumla ya chumvi yasizidi robo hadi moja ya nane ya kijiko kwa siku, sawa na 600 mg hadi 300 mg ya sodium kwa jumla. Chumvi ni kiungo maarufu katika vyakula vya migahawa ya fast food. Chumvi na shinikizo la damu ni viambato muhimu katika kutokea kwa kiharusi cha ubongo. Takwimu ya kitaifa inaonyesha kwamba kadiri jamii inavyokuwa na migahawa mingi ya fast food, ndivyo kiwango cha kiharusi katika jamii hiyo kinavyokuwa juu. [59]

Sasa jaribu ujuzi wako kuhusu chumvi: ni kipi kina sodium nyingi Zaidi Rice Chex cereal au potato chips, kwa kiasi cha ounce moja?

Rice Chex cereal, yenye 249 mg, ina karibu mara mbili ya sodium ya potato chips yenye 147 mg.

Sasa linganisha tortilla chips na tomato sauce ya kwenye kopo. **Tomato sauce ina 147 mg ya sodium kwa ounce, wakati chips zina 118 mg kwa ounce.**

Vipi kuhusu Kraft Velveeta processed cheese na hot dog sandwich? Kwa kila ounce, Velveeta ina karibu mara mbili ya sodium 420 mg ikilinganishwa na hot dog yenye 221 mg ya sodium. [60]

Soma lebo za vyakula! Usishangazwe. Au, bora zaidi, nunua vyakula visivyo na lebo, kama mahindi mabichi, ambayo yana sodium takribani moja ya kumi ya mahindi ya kwenye kopo. [61]

Nchini Japan, soy sauce ni chanzo kikubwa cha sodium iliyozidi. Katika Japan, asilimia 63 ya sodium ya chakula hutoka kwenye soy sauce na inatajwa kuwa sababu kubwa ya shinikizo la damu.[62]

Ikiwa matumizi yako ya sodium yako ndani ya viwango salama lakini bado unaonekana kuwa na shinikizo la damu linalohusiana na chumvi, huenda sababu ni vyakula vingine vinavyofanya mwili kuhifadhi sodium.

Carbohydrate zilizokobolewa na mafuta yaliyojaa huongeza uhifadhi wa chumvi na kusababisha shinikizo la damu. [63] [64] Sababu za kisaikolojia na kijamii pia zinaweza kuathiri tabia ya mwili kuhifadhi sodium. Watu walio chini ya msongo wa mawazo huhifadhi sodium. [65]

Kwa hiyo, watu ambao hawapati msongo mkubwa huhifadhi chumvi kidogo na huwa na shinikizo la damu la chini. Sodium inayoongeza shinikizo la damu haipatikani tu kwenye chumvi ya mezani; pia ipo kwenye chumvi ya baharini na monosodium glutamate (MSG). Kwa hiyo si jambo la kushangaza kwamba matumizi ya MSG yanaweza kuongeza uwezekano wa mtu kupata shinikizo la damu. [66]

KUONGEZEKA KWA UNENE KUNALETA WASIWASI WA SHINIKIZO

Fikiri mara mbili kabla ya kununua nguo kubwa zaidi; ukubwa wa nguo unahusishwa moja kwa moja na ongezeko la shinikizo la damu. [67] Kwa mujibu wa World Health Organization, zaidi ya watu bilioni moja duniani wana uzito kupita kiasi na zaidi ya milioni 300 wana unene kupita kiasi, hali inayohusishwa na viwango vya juu vya shinikizo la damu, ugonjwa wa figo na ugonjwa wa moyo na mishipa. [68] Tunachokula nchini Marekani, yaani Standard American Diet (SAD), huufanya ini kuwa na ugonjwa wa fatty liver disease na huongeza mara tatu hatari ya shinikizo la damu. [69] “Tumbo kubwa” ni ishara mbaya kwa shinikizo la damu. Kadiri mafuta ya tumboni (visceral fat) yanavyoongezeka, ndivyo hatari ya shinikizo la damu inavyoongezeka. [70]

Kila siku kula kipande kimoja cha cheese kunaweza kuongeza kwa kiasi kikubwa mzunguko wa kiuno, body mass index na shinikizo la damu kwa mwanaume. [71] Kwa kweli, kila inchi unayopunguza kwenye mzunguko wa kiuno hupunguza hatari yako ya shinikizo la damu kwa asilimia 15.[72] Kwa kuhusisha na ongezeko la uzito kwa pauni, ongezeko la pauni 55 juu ya uzito unaofaa huongeza hatari ya shinikizo la damu kwa asilimia 265.[73] Inakadiriwa kwamba kwa hadi asilimia 50 ya watu wazima nchini Marekani ambao shinikizo lao la damu linadhibitiwa kwa dawa, hitaji la dawa linaweza kuondolewa kwa kupunguza uzito kwa kiasi cha wastani.[74]

UKOSEFU WA USAWA KATI YA VYANZO VIKUBWA VYA PROTINI

Ingawa wengi huona protini kuwa muhimu, matumizi mengi ya protini yamehusishwa na shinikizo la damu. [75] Hasa, protini ya wanyama hupunguza utendaji wa figo na kuongeza hatari ya shinikizo la damu. [76] Kwa upande mwingine, protini ya mimea imeonyeshwa kupunguza shinikizo la damu. Kuongezeka kwa matumizi ya protini ya mimea, matunda na mboga hupunguza kwa kiasi kikubwa hatari ya shinikizo la damu. [77]

Kwa mfano, makundi mawili ya watu yalilinganishwa. Kundi la kwanza lilitumia maziwa ya ng'ombe, chanzo cha protini ya wanyama, na kundi la pili lilipewa maziwa ya soya, chanzo cha protini ya mimea. Wale waliotumia maziwa ya soya walikuwa na shinikizo la damu lililokuwa chini kwa 18 mmHg kuliko wale waliotumia maziwa ya ng'ombe. [78] Zaidi ya hayo, kubadilisha kwenda soya kunaweza kuboresha utendaji wa figo na sensitivity ya insulin, [79] na kupunguza kiwango cha jumla cha cholesterol katika damu.[80]

VASOCONSTRICTION

Sasa tugeukie athari ya vasoconstriction katika maendeleo ya shinikizo la damu.

Mishipa ya damu inapobana, nafasi ya kupitisha damu huwa ndogo, hivyo shinikizo kubwa huhitajika ili kupeleka kiwango kilekile cha damu mahali kinapohitajika.

Ni nini hufanya mishipa ya damu ibane?

Msongo wa kisaikolojia, baridi hasa kwenye mikono na/au miguu na kushindwa kudumisha ulaji wa kutosha wa maji. Pia kuna vitu vinavyochochea kubana kwa mishipa, kama caffeine kutoka chai, kahawa, cola, n.k., pamoja na tumbaku.

KUONGEZA SHINIKIZO: MATUMIZI YA VITU VYA KULEVYA

Caffeine huufanya moyo uitikie kana kwamba uko katika hali halisi ya maisha au kifo, yaani hali ya “fight-or-flight”. Caffeine huongeza shinikizo la damu kwa muda mfupi kwa kuongeza viwango vya adrenaline—epinephrine na norepinephrine—katika damu. [81] Pia caffeine huongeza ugumu wa mishipa ya damu na kuzuia kulegea kwa mishipa. [82] Athari ya caffeine kwenye shinikizo la damu hutegemea kiwango: kadiri unavyotumia caffeine nyingi, ndivyo shinikizo lako la damu linavyoongezeka.[83]

Chocolate ina caffeine pamoja na vitu vingine vinavyofanya kazi kwenye mishipa, kama theobromine. [84]

Baadhi ya tafiti zimeundwa kuonyesha faida za chocolate kwa shinikizo la damu, lakini tafiti hizo zimekosolewa kwa kutokuwa na taarifa ya kutosha kuhusu ushiriki wa viwanda, ufadhili au upendeleo wa watafiti. [85] Katika tafiti za watu halisi wanaokula chocolate inayopatikana madukani, haijaonekana kupunguza shinikizo la damu; badala yake inaweza kuchochea kula kati ya milo na kuongeza uzito. [86] Nicotine iliyomo kwenye tumbaku pia hubana mishipa na

huongeza shinikizo la damu. Wasiovuta sigara wana hatari ya kupata shinikizo la damu iliyo chini kwa asilimia 12 kuliko wavutaji. [87]

HATARI ZA MAZINGIRA

Je, unawakumbuka watu waliougua kutokana na FEMA trailers zilizotumiwa kuwahifadhi waathirika wa kimbunga Katrina kilichopiga Louisiana? [88] Kemikali za mazingira kama formaldehyde na acetaldehyde, ambazo hupatikana katika vifaa vya ujenzi na moshi wa sigara, huongeza shinikizo la damu kwa kubana mishipa na kuongeza kiasi cha damu ambacho moyo husukuma. [89] Vasoconstriction inaweza pia kuwa matokeo ya bombardment ya electromagnetic. Kwa mfano, **dakika 40 kwenye simu ya mkononi** inaweza kuongeza shinikizo la damu kwa pointi 10. [90]

HALI YA HEWA NA MAVAZI

Mikono au miguu inapokuwa baridi, mishipa ya damu katika maeneo hayo hubana ili kupunguza damu inayokwenda huko na hivyo kupunguza upotevu wa joto. Viungo vilivyopigwa na baridi kwa sababu ya mavazi yasiyotosha hulazimisha damu kurudi moyoni, na kuufanya moyo ufanye kazi mara mbili na kuongeza shinikizo la damu. [91] Inafurahisha kwamba shinikizo la damu huongezeka wakati wa baridi, hasa kwa wazee, [92] lakini pia matumizi ya chumvi na mafuta huongezeka. [93]. Kwa upande mzuri, usidharau manufaa ya jua! Mwanga wa jua hulegeza mishipa ya damu na kupunguza shinikizo la damu, [94][95] na huongeza vitamin D, ambayo pia imeonyeshwa kusaidia kupunguza shinikizo la damu.[96]

ISHUGHULIKISHE MISULI YAKO!

Usikae tu maisha yote! Watu wanaofanya shughuli za mwili huwa na shinikizo la damu la chini; watu wasio na shughuli za mwili hupata shinikizo la damu.[97]

Kutofanya mazoezi husababisha kuongezeka kwa upinzani wa mishipa dhidi ya mtiririko wa damu, [98] kupungua kwa mtiririko wa damu kwenye misuli mikubwa, [99] na kuongezeka kwa shinikizo la damu. [100], Matumizi ya kawaida ya misuli huiweka ikiwa nyumbufu na yenye usambazaji mzuri wa damu, jambo ambalo hupunguza shinikizo la damu. [101] [102]

Faida za mazoezi katika kutibu shinikizo la damu mara nyingi hazipewi uzito unaostahili. Mazoezi ni muhimu kwa karibu kila upande wa afya. Kwa aina ya mazoezi, kutembea ni bora sana. Kwa kweli, kutembea hatua 10,000 au zaidi kwa siku kunaweza kupunguza shinikizo la damu kwa pointi 10. [103] Hii ni takribani maili 4. Kuinua uzito au mazoezi ya resistance training yanaweza kuongeza manufaa. Dakika 20 kwa siku kwenye gym zinaweza kupunguza shinikizo la damu kwa pointi 10–12. [104]

KUPUMZIKA

Unahitaji massage? Massage ya mgongo huleta utulivu na hupunguza shinikizo la damu. [105]

Bafu zuri la uvuguvugu pia linaweza kusaidia. [106]

EXTERNAL COMPRESSION

External compression, yaani damu kuzuiwa kwa kitu kinachobana mshipa kutoka nje, husababisha shinikizo la damu.

Athari yake ni kama kuweka kidole gumba mwisho wa bomba la bustani; matokeo yake ni kuongezeka kwa shinikizo la damu. Mtu akikushika shingo kutoka nyuma na kubana njia ya hewa

na mishipa ya carotid, si tu macho yanaweza kuonekana kujitokeza, bali shinikizo la damu pia linaweza kuongezeka. Vitu vinavyoweza kubana mishipa kutoka nje ni pamoja na uvimbe, edema, inflammation, glycation ya kuta za mishipa, mavazi yanayobana na unene kupita kiasi.

MAVAZI YANAYOBANA

Mavazi yanayobana, kama mikanda na elastic, hubana mishipa ya damu na kuongeza shinikizo la damu. Mavazi yanayoning'inia kutoka mabegani huacha kiuno bila shinikizo na kusaidia kupunguza shinikizo la damu. Mavazi yaliyolegea huruhusu damu kutiririka kwa uhuru zaidi na kusaidia shinikizo la kawaida. [107]

Badala ya kutumia mkanda kushikilia suruali, suspenders zinaweza kusaidia kuzuia kubana kiunoni.

PUMUA KWA USAHIHI

Kupumua kwa kina kwa kutumia tumbo, tofauti na kupumua kwa juu kwa kutumia kifua/shingo, hupunguza shinikizo la damu. [108] [109]

VISCOSITY YA DAMU: DAMU NZITO

Ikiwa damu inakuwa nzito na yenye kunata, shinikizo kubwa zaidi huhitajika kuisukuma kupitia mishipa, na shinikizo la damu huanza. [110]

Damu inapokuwa nzito, tunasema viscosity imeongezeka kupita kiasi. Kinachotokea ni kwamba chembe nyekundu za damu hushikamana pamoja katika mfululizo au mnyororo. Hali hii huitwa **rouleaux**. [111] Vitu vinavyojulikana kuongeza viscosity ya damu na rouleaux ni pamoja na msongo wa mawazo, upungufu wa maji mwilini, kula vyakula vilivyosindikwa/kukobolewa, cholesterol nyingi ya damu, lishe yenye mafuta mengi, kula kupita kiasi, na mkusanyiko wa taka mwilini. **Vyakula vilivyokobolewa, kama mafuta na sukari, hufanya chembe nyekundu za damu kushikamana katika makundi au minyororo inayoitwa rouleaux, ambayo inaweza kuonekana chini ya darubini.** Shinikizo kubwa la damu huhitajika kusafirisha damu hii iliyokuwa nzito. [112]

MAFUTA

Kwa sababu kula kiasi kikubwa cha mafuta husababisha rouleaux, vyakula vyenye mafuta yaliyojaa yaani bidhaa za wanyama, siagi, [113] margarine, shortening, na/au mafuta ya nazi, [114] n.k. huongeza kwa kiasi kikubwa hatari ya shinikizo la damu. [115] Zaidi ya hayo, bidhaa hizi huongeza cholesterol ya damu, hivyo kufanya damu kuwa nzito zaidi na kuongeza shinikizo la damu. Hata Mungu amezungumzia suala la mafuta: “Waambie wana wa Israeli, mkisema, Msile mafuta ya namna yo yote...” [116]

Je, unajua kiasi cha mafuta kilichomo katika chakula unachokula?

Mafuta katika lishe huongeza shinikizo la damu kwa sababu huifanya damu kuwa nzito na kufanya mishipa ya damu kuwa migumu. Ikilinganishwa na mafuta ya asili ya mimea, mafuta ya nguruwe (lard) huongeza kwa kiasi kikubwa shinikizo la damu na hatari ya shinikizo la damu. [117] Tatizo hili huwa kubwa zaidi mtu anapozeeka. [118]

Ukweli huu wa kisayansi unaelezwa pia katika Biblia: “Na nguruwe, kwa sababu ana kwato zilizopasuliwa, lakini hacheui... ni najisi kwenu...” [119]

Kundi moja la watafiti lilitaka kuona nini kingetokea ikiwa watu wangewekwa kwenye lishe isiyo na mafuta ya wanyama kwa siku 10. Iligundulika kwamba siku 10 bila mafuta ya wanyama zilipunguza kwa kiasi kikubwa shinikizo la damu. [120]

Inafurahisha kwamba jaribio kama hilo liliwahi kufanywa karibu mwaka 600 K.K. huko Babeli. [121] Daniel alikuwa mateka wa Kiyahudi huko Babeli. Alipopewa chakula cha nyama aliomba:

“Jaribu watumishi wako, nakusihi, muda wa siku kumi; na watupatie kunde tule, na maji tunywe.” [122]

Matokeo yake yalikuwa kwamba Daniel na wenzake watatu waliokuwa katika kundi hilo la utafiti walifanya vizuri mara kumi zaidi shuleni kuliko wanafunzi wengine wote wa chuo kikuu.

Vipi kuhusu mafuta ya mboga yaliyosindikwa? Mafuta haya si salama moja kwa moja kwa sababu tu yametokana na mimea. Mafuta yaliyosafishwa, hasa canola oil, [123] huongeza shinikizo la damu [124] na hatari ya kiharusi katika umri mdogo. [125]

Tatizo lingine la mafuta ni kinachotokea yanapopashwa joto. Kwa mfano, kuyapasha mafuta kwenye kikaango husababisha uharibifu mkubwa wa ubora wake na kuyafanya kuwa sumu, hivyo kuchangia kuanza na kuwa mbaya zaidi kwa shinikizo la damu. [126]

Je, unajua kiasi cha mafuta kilichomo kwenye chakula unachokula?

Mafuta katika lishe huongeza shinikizo la damu kwa sababu huifanya damu kuwa nzito, hufanya mishipa kuwa migumu, [127] na husababisha endothelial dysfunction. [128] Endothelial dysfunction ni nini? Nitric oxide hutumiwa na mwili kulegeza mishipa ya damu. Mishipa inaposhindwa kuitikia vizuri nitric oxide, hali hii huitwa endothelial dysfunction yaani utando wa ndani wa mishipa wa damu haufanyi kazi vizuri. [129]

Vyakula vinavyopunguza uwezo wa mishipa kuitikia ujumbe wa nitric oxide wa kulegea ni pamoja na mafuta mengi, [130] chumvi, [131][132] cholesterol,[133][134] hasa oxidized cholesterol,[135][136] kula kupita kiasi,[137][138] sukari,[139][140] hasa fructose,[141][142] na glycation ya protini inayotokea katika kisukari.[143]

LISHE YA KULEGEZA MISHIPA

Kwa upande mwingine, lishe sahihi ina athari kubwa katika uwezo wa mishipa kuitikia nitric oxide.

Ninaita hii “lishe ya kulegeza mishipa,” ikimaanisha lishe inayofanya mishipa yako kuitikia vizuri zaidi ujumbe wa mwili wa kulegea.

Mabadiliko ya lishe yanayojulikana kuboresha utendaji wa mishipa ni pamoja na lishe ya mboga, oats (uji wa shayiri),[145] nyanya,[146] lishe yenye antioxidants nyingi,[147] kama vitamin E,[148] na madini kama zinc[149] na copper.[150] Upungufu wa omega-3 husababisha shinikizo la damu.[151] Flaxseed na walnuts ni vyanzo vizuri vya omega-3 fatty acids. Omega-3 fatty acids zina uwezo mkubwa wa kuzuia kuganda kwa damu na kupunguza inflammation. Kinyume chake, omega-6 fatty acids, zinazopatikana kwenye mafuta ya mboga yaliyosafishwa na nyama, huchochea kuganda kwa damu na inflammation. Omega-3 fatty acids pia husaidia katika matibabu ya hyperlipidemia, shinikizo la damu na rheumatoid arthritis. [152]

MCHANGANYIKO HATARI: MAFUTA NA SUKARI

Mafuta na sukari vinapounganishwa hutengeneza mchanganyiko hatari sana.

Hatari ya shinikizo la damu kutokana na vitu hivi viwili si ya kujumlisha tu; ni ya kuzidishana. [153] Hii ina maana kwamba kiasi kidogo tu cha vitu hivi viwili vikichanganywa kinaweza kuleta hatari kubwa kiafya.

TAMU NYINGI YA KIMAREKANI

Tukizungumzia sukari na carbohydrates zilizokobolewa kama unga mweupe, pasta nyeupe, mchele mweupe na breakfast cereals zilizokobolewa ambazo hubadilika haraka kuwa sukari katika damu—vijiko 20 vya sukari huongeza shinikizo la damu kwa 2 mmHg, na vijiko 40 huongeza kwa 5 mmHg. [154] Mmarekani wa kawaida hutumia vijiko 47 vya sukari kila siku. [155] Hatari ya sukari katika lishe ni kwamba huishia kwenye damu. Sukari ya damu inapoongezeka, shinikizo la damu pia huongezeka. [156] Si carbohydrates zote zinafanana. Sukari na complex carbohydrates zinaweza kuwa na kalori sawa kwa gramu kinadharia, lakini athari zao kwenye sukari ya damu, hatari ya shinikizo la damu na matatizo ya kisukari ni tofauti sana. [157] Complex carbohydrates kutoka kwenye lishe ya mimea isiyokobolewa huvumiliwa vizuri zaidi, hupunguza hatari ya shinikizo la damu na hutoa lishe yenye virutubisho vingi inayoboresha afya. [158] Carbohydrates zilizokobolewa husababisha shinikizo la damu kwa kuongeza uzalishaji wa norepinephrine, dopamine na epinephrine, na kwa kufanya kuta za mishipa kuwa nene. [159]

Siri ni kuacha kutumia sukari; hufanya kazi, na shinikizo la damu hushuka. [160] Sukari ni sumu inayokusanyika. Carbohydrates zilizokobolewa huunda tabaka linalonata la sukari juu ya chembe za damu, mishipa na tishu nyingine za mwili. Kadiri unavyokula vyakula vilivyosindikwa zaidi, ndivyo sukari ya damu inavyopanda na dutu hii tamu yenye kunata inavyofunika tishu za mwili.

Tabaka hili huitwa **glycation**, na hukusanyika kadiri muda unavyopita, na kusababisha ugumu wa mishipa na misuli ya moyo, atherosclerotic plaque na shinikizo la damu. [161] Kadiri unavyokula vyakula vilivyosindikwa zaidi katika maisha yako, ndivyo nafasi yako ya kupata shinikizo la damu unapokuwa mkubwa inavyoongezeka. Watu wanaotumia lishe isiyokobolewa ya mimea wanaweza kuwa na mfumo wa moyo na mishipa ulio katika hali bora zaidi na huenda wakaepuka shinikizo la damu wanapozeeka. [162]

Kula carbohydrates zilizokobolewa kunaweza kusababisha hali iitwayo **insulin resistance**, ambapo seli za mwili haziondoi tena sukari kutoka kwenye damu kwa kuitikia viwango vya kawaida vya insulin. [163] [164] Mifano ya carbohydrates zilizokobolewa ambazo zimeonyeshwa kuongeza insulin **resistance ni mchele mweupe**, [165] unga mweupe unaopatikana kwenye maandazi na mkate mweupe, [166] [167] na sukari iliyosindikwa. [168] [169]

Fructose inatia wasiwasi zaidi miongoni mwa carbohydrates zilizokobolewa; uwezo wake wa kusababisha insulin resistance na shinikizo la damu unazidi ule wa sukari ya mezani. [170] [171]

Sababu nyingine za insulin resistance ni lishe yenye mafuta mengi, [172] kula kati ya milo au snacking, [173] na unene kupita kiasi. [174] Matokeo ya insulin resistance ni viwango vya juu vya cholesterol [175] na, bila shaka, shinikizo la damu. [176] [177] [178] Watu ambao hawachochei insulin yao kuzalishwa kupita kiasi kwa kula carbohydrates zilizokobolewa hawapati shinikizo la damu linalochochewa na insulin. Kula carbohydrates zilizokobolewa kwa kiwango unachotaka kuona shinikizo lako la damu likipanda. Kuhusu fructose, kunywa soda moja yenye fructose kwa siku kunaweza kuongeza hatari ya shinikizo la damu kwa asilimia 77. [180] Na ikiwa ulikuwa unafikiri sweeteners bandia ni mbadala mzuri, fikiria tena. Sweeteners bandia kama aspartame husababisha shinikizo la damu kuwa juu sana kwa baadhi ya watu. [181] Kuacha sweeteners hizi kunaweza kuwa siri ya kupunguza shinikizo la damu kwa baadhi ya watu. [182]

Kwa upande mwingine, kuna sweetener isiyo ya sukari ambayo imeonyeshwa kuboresha shinikizo la damu stevia.[183] Hufanya hivyo kwa kufanya kazi kama calcium-channel blocker, ambao ni utaratibu wa baadhi ya dawa za shinikizo la damu.[184]

UGUMU WA MISHIPA

Kukakamaa kwa mishipa husababisha upinzani dhidi ya mtiririko huru wa damu.

Mishipa ya damu kwa kawaida hupanuka na kulegea kwa kila mpigo wa moyo. Ikiwa mishipa inakuwa migumu, ugumu wake huzuia mtiririko huru wa damu na shinikizo huongezeka. [185] [186] Atherosclerotic plaque ni mfano wa mchakato huu. [187] Ikiwa plaque inapunguza kipenyo cha mishipa wa damu, shinikizo kubwa zaidi huhitajika kupitisha kiwango kilekile cha damu kupitia nafasi ndogo. Hali nyingine zinazoweza kuongeza shinikizo kwa njia hii ni inflammation ya mwili, [188] kutofanya mazoezi na endothelial dysfunction.

Endothelial dysfunction ni hali ambapo ukuta wa ndani wa mishipa wa damu unapoteza uwezo wa kuitikia ishara za mwili za kulegea. Mambo yanayosababisha endothelial dysfunction ni sukari nyingi ya damu, uric acid na mafuta mengi.

INFLAMMATION NA ENDOTHELIAL DYSFUNCTION

Inflammation ina nafasi nyingi katika maendeleo ya shinikizo la damu.

Mbali na kusababisha endothelial dysfunction, huongeza unene wa kuta za mishipa ya damu, hivyo kufanya mtiririko wa damu kuwa mgumu na kuongeza shinikizo linalohitajika kwa mzunguko wa kawaida. [189] Watu wenye inflammation nyingi wana hatari ya shinikizo la damu iliyo juu kwa asilimia 40. [190] Watu wengi wanatambua uhusiano kati ya chumvi na ongezeko la shinikizo la damu. Kwa kweli, ingawa arterial hypertension ni sababu kubwa ya magonjwa na vifo duniani, imeonekana kuwa karibu haipo katika baadhi ya jamii zinazotumia vyakula vya asili vyenye chumvi kidogo au visivyo na chumvi. [191] Hii ni kwa sehemu kutokana na kuhifadhi maji, [192] [193] lakini pia kutokana na inflammation. [194]

Chumvi nyingi husababisha shinikizo la damu na kuumia kwa figo, kwa sehemu kupitia oxidative stress inayowasha kuta za mishipa na figo. [195]

SUMU KATIKA MAZINGIRA

Lead [196] na arsenic [197] ni sumu za mazingira zinazoongeza inflammation ya mwili mzima na zimeonyeshwa kusababisha shinikizo la damu. **Lead** ni uchafuzi wa kawaida katika rangi za zamani, vumbi linalozunguka nyumba za zamani na hata inaweza kupatikana katika virutubisho kama calcium. [198] **Arsenic** mara nyingi huchafua maji ya kunywa ya umma [199] na maji ya chupa. [200] Arsenic hutumiwa katika chakula cha kuku na nguruwe kama kichocheo cha ukuaji na hupatikana katika nyama za wanyama hao. Arsenic ni kirutubisho kinachoruhusiwa katika chakula cha wanyama na wakulima hukitumia kudhibiti vimelea vya tumboni kwa kuku. [201]

Kwa sababu hiyo, mayai [202] na nyama ya kuku [203] zimeonekana kuwa vyanzo vya arsenic katika lishe. Vyakula vya baharini, kwa sababu samaki huishi katika maji yaliyochafuliwa, vimeonekana kuwa chanzo kikubwa cha arsenic kwa watu wanaokula seafood (vyakula vya baharini [204] Epuka arsenic na epuka shinikizo la damu.

NI ANTIOXIDANTS KIASI GANI NINAHITAJI?

Siri ya kudhibiti inflammation ni kuwa na kinga nzuri. Antioxidants na phytochemicals kutoka kwenye vyakula vya mimea hutoa kinga hii; hupunguza inflammation mwilini [205][206] na kurekebisha shinikizo la damu.[207] Unaweza kuuliza: ninahitaji antioxidants kiasi gani? Je, naweza kupata nyingi sana? Hatua za mtindo wa maisha si rahisi kuzidisha kupita kiasi, zinaweza kuwa na matokeo makubwa zaidi katika hali ngumu na hazisababishi madhara hatari kwa urahisi. Antioxidants hupunguza shinikizo la damu kwa watu wenye shinikizo la damu, si kwa watu wenye afya ambao wana shinikizo la kawaida. [208] Lishe si njia pekee ya kuathiri mfumo wa kinga dhidi ya antioxidants. Mazoezi husaidia kupunguza inflammation mwilini na hivyo kupunguza shinikizo la damu. [209] Kwa kuwa periodontal disease huongeza inflammation na shinikizo la damu, usafi mzuri wa kinywa pia unaweza kuwa muhimu katika kudhibiti shinikizo la damu. [210]

MAAGIZO YA MAPUMZIKO YA UREMBO

Moja ya kinga za mwili dhidi ya inflammation iliyoinuka ni homoni inayozalishwa na pineal gland katika ubongo, inayoitwa **melatonin**. Melatonin ni antioxidant ya asili inayopunguza shinikizo la damu. [211]

Mwanga wa bandia wakati wa jioni huathiri usingizi, huvuruga uzalishaji wa melatonin na kuongeza shinikizo la damu. [212][213][214] Watu wanaolala kwa ratiba ya kawaida na kupata usingizi wa kutosha katika giza kamili wana kiwango bora cha melatonin na shinikizo la chini la damu.[215][216] Kwa hiyo, watu wanaofanya kazi kwa shift wana hatari kubwa zaidi ya shinikizo la damu.[217][218] Mshahara wa ziada wa kazi ya usiku huenda usistahili hatari ya shinikizo la damu. Kazi za mchana za kawaida ni rafiki zaidi kwa shinikizo la damu.

Tunapendekeza kulala saa 3:30 usiku? **[Maandishi ya awali yanasema 9:30 p.m.; hapa maana yake ni kulala saa 9:30 usiku]** kwa ajili ya uzalishaji wa kutosha wa melatonin na shinikizo bora la damu. Watu wanaolala kwa urahisi na kupata mapumziko ya kutosha hupata shinikizo la damu kidogo. Watu wanaopumua vizuri wakati wa usiku, bila sleep apnea au kukoroma, huwa na shinikizo la damu la chini. [219]

NYAMA NA ENDOTHELIAL DYSFUNCTION

Ni nini huongeza inflammation, huongeza unene wa kuta za mishipa na kusababisha endothelial dysfunction?

Matumizi ya bidhaa za wanyama.

Kutumia sehemu tatu au zaidi za nyama, kuku, mayai, samaki na/au seafood kwa siku huongeza hatari ya shinikizo la damu kwa asilimia 67. [220] Kinachotia wasiwasi zaidi ni bidhaa za nguruwe. American Heart Journal imenukuliwa ikisema: “Kuondolewa kabisa kwa nyama ya nguruwe kwa aina zote ni kanuni nzuri ya matibabu ya lishe katika kudhibiti arterial hypertension kwa wagonjwa wote.” Pia imenukuliwa ikisema kwamba kuondolewa kwa aina zote **za nyama ya nguruwe katika lishe ya watu wote** huenda kuwa njia nzuri ya kuzuia na kudhibiti shinikizo la damu. [221] Labda hii ndiyo sababu katika kitabu cha Mungu haikuchukuliwa kuwa chakula, kwa kuwa Leviticus inasema: “Na nguruwe... ni najisi kwenu.” [222] Hata mayai hayataweza kukusaidia kupunguza shinikizo la damu. Mayai yanatajwa kuwa na mchango katika hatari ya shinikizo la damu kwa watu wenye umri wa miaka 40 na zaidi. [223] Bidhaa za wanyama hazina antioxidants zinazolenga suluhisho, na kama si sehemu ya suluhisho, mara nyingi huwa sehemu ya tatizo. Maandishi haya yanaona kwamba hali hii inahusu ulaji wa bidhaa za wanyama.

BIDHAA ZA WANYAMA ZAKABILIWA NA MTHANI WA ASIDI

Asidi si rafiki wa tishu nyeti za mwili. Asidi huongeza endothelial dysfunction na hivyo kusababisha shinikizo la damu. [224] Kwa hiyo, vyakula vinavyotengeneza asidi, hasa cheese na protini ya wanyama, huongeza kwa kiasi kikubwa shinikizo la damu. [225] Katika kuchunguza asidi kwenye mkojo ili kutambua vyakula vinavyotengeneza asidi, matunda na mboga hupunguza kiasi cha asidi kinachotengenezwa wakati wa mmeng'eny. Nafaka, samaki na nyama nyekundu huongeza utengenezaji wa asidi, lakini cheese huongeza karibu mara tatu kiasi cha asidi ikilinganishwa na baadhi ya vyakula hivyo. [226] Moja ya asidi inayohusika ni **uric acid**. Kitu chochote kinachoongeza uric acid kwenye damu huongeza hatari ya shinikizo la damu. [227] Vyakula vinavyoongeza uric acid ni pamoja na nyama, hasa nyama za viungo vya ndani, [228][229] seafood,[230] fructose,[231][232] mara nyingi katika high-fructose corn syrup au agave, beer na vinywaji vya pombe.[233]

Kwa hiyo, lishe inayosaidia kupunguza hatari ya gout inayotokana na uric acid iliyoitaka inaweza pia kupunguza hatari ya shinikizo la damu. Vyakula vinavyojulikana kusaidia kupunguza uric acid ni pamoja na matunda kama limau [234] na citrus nyingine, cherries [235], strawberries [236], grapes, apples, tomatoes, bananas na pomegranates; mboga kama celery, potatoes, beets na endive; na karanga nyingi za miti, hasa chestnuts. [237] Kwa jambo hilo, chakula chochote chenye uwezo wa kuongeza uzalishaji wa mkojo (diuretic) kinaweza kusaidia kupunguza shinikizo la damu linalosababishwa na uric acid nyingi. Vyakula vyenye sifa za kuongeza mkojo ni pamoja na artichoke, celery, eggplant, cauliflower, green beans, grape, apple, peach, pear, melon na watermelon. [238] Unapoongeza kiasi cha mkojo unaozalisha, unaweza kuongeza uric acid inayotolewa kwenye mkojo na hivyo kupunguza kiwango chake katika damu.

KINYWAJI KIKALI

Athari ya pombe katika kuongeza shinikizo la damu haikomei kwenye kuongeza uric acid katika damu. Kuna uhusiano wa moja kwa moja kati ya kiasi cha pombe kinachotumiwa na ongezeko la shinikizo la damu. [238] Kadiri unavyokunywa pombe nyingi, ndivyo shinikizo lako la damu linavyoongezeka. [239] Mtu anayekunywa vinywaji viwili vya pombe kwa siku anaweza kupunguza hatari yake ya shinikizo la damu kwa theluthi moja kwa kuacha tu kunywa pombe. [239]

Mwenye hekima anasema: “Mvinyo hudhihaki, kileo hufanya ghadhabu; na kila mtu apotoshwaje nacho si mwenye hekima.” [240] [241]

KUCHAGUA MTINDO WA LISHE UNAOHUSIANA NA SHINIKIZO LA DAMU

Lishe ina mchango mkubwa katika shinikizo la damu—baada ya yote, wewe ni kile unachokula!

Katika utafiti uliolinganisha lishe mbalimbali, iligundulika kwamba wasiokuwa vegetarian—watumiaji wa nyama, mayai na maziwa—hula mafuta mengi kwa asilimia 50 zaidi, wana cholesterol ya jumla iliyo juu kwa asilimia 30, sukari ya damu iliyo juu kwa asilimia 32, na wana uwezekano mara sita zaidi wa kupata shinikizo la damu. [242] Katika jamii za vijijini ambazo bado zinafuata mtindo wao wa asili wa maisha unaotegemea zaidi vyakula vya mimea, na ambazo hazijaathiriwa sana na lishe ya Magharibi, shinikizo la damu limeelezwa kuwa karibu halipo na haliongezeki kwa sababu ya umri. [243] Shinikizo lao la wastani ni karibu 110/60 mmHg, cholesterol wastani 129 mg/dl, sukari ya damu 55 mg/dl na body mass index 20 kg/cm². [244]

Katika utafiti wa aina nyingine, watu waliokuwa kwenye lishe ya mimea kabisa walikuwa na kiwango cha shinikizo la damu cha asilimia 5, vegetarian wanaotumia maziwa na mayai asilimia

10, fish-eating vegetarians asilimia 12, na walaji wa nyama asilimia 21. [245] Kwa mtazamo mwingine, watu wanaotumia lishe ya mimea kabisa walikuwa na robo moja ya hatari ya kupata shinikizo la damu ikilinganishwa na walaji wa nyama. [246] Katika kufikiria mtindo wa maisha unaokuza afya, lishe ya vegan ina faida nyingi za kupunguza shinikizo la damu.

Katika utafiti mmoja, wagonjwa wenye shinikizo la damu waliokuwa wakitumia dawa kwa miaka 8 walipewa lishe ya vegan kwa mwaka mmoja. Shinikizo la damu lilishuka na wengi waliweza kuacha au kupunguza sana dawa zao. [247] Kula tu matunda na mboga nyingi zaidi pia kuna manufaa. Watu wanaokula matunda na mboga nyingi wana hatari ya shinikizo la damu iliyo chini kwa asilimia 77 kuliko wale wanaokula kidogo. [248] Mboga hupunguza shinikizo la damu na kuzuia lisipande kadiri miaka inavyopita. [249]

Mboga zinazojulikana kusaidia kupunguza shinikizo la damu ni pamoja na mboga za majani zenye magnesium na potassium nyingi, [250] spinach yenye folate nyingi, [251] celery,[252][253] carrots,[254] ginger,[255] broccoli,[256] kwa sababu hulegeza mishipa, beets,[257] basil,[258] garlic,[259][260] na onions zinazoliwa mbichi, ambazo zimeonyeshwa kupunguza shinikizo la damu.[261] Matunda pia hupunguza shinikizo la damu.[262] Matunda yaliyoonyeshwa hasa kuwa na athari chanya ni pamoja na eggplant,[263][264] tomatoes,[265] pumpkin au squash[266] yenye potassium nyingi na sodium kidogo, cranberry[267] yenye activity ya ACE inhibitor inayofanana na dawa maarufu ya shinikizo la damu, apple,[268] pomegranates,[269] grapefruit[270] inayolinda mishipa, ina athari ya diuretic na kuboresha mtiririko wa damu, na olives[271] zenye uwezo wa kuzuia calcium channels na kusaidia nitric oxide-mediated vasodilation. Upungufu wa baadhi ya madini kwenye lishe huongeza hatari ya shinikizo la damu. **Iron:** watu wanaokula lishe bora ya vegetarian yenye iron ya kutosha huwa na shinikizo la damu la chini. Iron inayotokana na nyama, inayojulikana kama heme-iron, haisaidii katika jambo hili. [272] **Potassium:** hupunguza shinikizo la damu, [273] lakini dawa maarufu ya shinikizo la damu, diuretic, hupunguza potassium. [274] **Calcium:** inahitajika kudumisha shinikizo la kawaida la damu.[275] **Copper:** upungufu wake, ambao unaweza kutokana na kula carbohydrates zilizokobolewa, umeonyeshwa kusababisha cholesterol nyingi, triglycerides nyingi, shinikizo la damu na glucose intolerance (kisukari).[276][277] **Magnesium:** upungufu wake huchochea shinikizo la damu.[278]

Viwango vya madini hupunguzwa na pombe, chumvi, phosphoric acid (soda), matumizi ya kahawa, kutokwa jasho sana, msongo mkali wa muda mrefu, hedhi nyingi, dawa za diuretic na dawa nyingine, baadhi ya vimelea kama pinworms, sukari/carbohydrates zilizokobolewa na matumizi ya tumbaku. Katika lishe ya matunda na mboga mbichi, washiriki walipoteza pauni 8, walipunguza shinikizo la damu kwa 18 mmHg, na asilimia 80 ya waliokuwa wakivuta sigara au kunywa pombe waliacha tabia hizo kwa hiari.

KUNA NINI KWA KIFUNGUA KINYWA?

Watu wanaokula kifungua kinywa wana shinikizo la damu la chini kuliko wale wanaokiruka. [279] Katika kupanga kifungua kinywa, tahadhari na “cereal killer”. Katika wanyama wa maabara, processed breakfast cereals nyingi, za baridi au moto, zilikuwa na ugumu wa kudumisha uhai na zilisababisha shinikizo la damu. [280] Chagua vyakula vya mimea vilivyo kamili, visivyosindikwa na visivyokobolewa kwa kifungua kinywa chenye afya na rafiki kwa shinikizo la damu. Ikiwa huwezi kutambua chakula ni nini kwa kukitazama kwa mfano “O” au flakes ambazo hazifanani tena na chanzo chake usiweke kinywani.

Ni bora kula nafaka zinazotambulika kama granola, oatmeal na vyakula vingine vya whole grain.

Sababu ya kusafisha/kukoboa vyakula kusababisha matatizo mengi ya shinikizo la damu ni kwamba fiber na madini huondolewa wakati wa mchakato. [281] Fiber kutoka kwenye nafaka imeonyeshwa kupunguza hatari ya shinikizo la damu kwa asilimia 40.[282] Fiber ya mboga, gramu 65 kwa siku, inaweza kupunguza shinikizo la damu kwa pointi 12–14.[283] Maharagwe husaidia kupunguza shinikizo la damu kwa sababu yana sodium kidogo, fiber yenye afya na madini yanayosaidia kupunguza shinikizo kama potassium, magnesium na calcium.[284]

Karanga pia zina manufaa. Sehemu moja ya karanga kwa siku inaweza kupunguza hatari ya shinikizo la damu kwa asilimia 18. [285] Aina inayopendelewa ni karanga mbichi zenye chumvi kidogo au zisizo na chumvi. Hata “**soy nuts**”, **yaani soya iliyooka**, imeonyeshwa kuwa na athari nzuri kwenye shinikizo la damu. [286] Vitamin C ni antioxidant muhimu katika kushughulikia shinikizo la damu. Viwango vya vitamin C katika damu vinapodumishwa kupitia vyanzo vya asili vya lishe, shinikizo la damu hushuka, [287] lakini si wakati viwango hivyo vinatafutwa kupitia vidonge vya vitamin. [288] Lishe yenye vitamini hizi za asili kutoka matunda na mboga hupunguza shinikizo la damu. [289] Lishe moja kama hiyo ni Hawaiian diet. Ina carbohydrates changamano asilimia 77 ya kalori, mafuta asilimia 12 na protini asilimia 11, na imeonyeshwa kupunguza shinikizo la damu kwa hadi pointi 10. [290] Kundi moja la watafiti lilitaka kuongeza athari ya lishe katika kudhibiti shinikizo la damu na kuwaweka wagonjwa kwenye lishe ya miezi sita yenye asilimia 62 ya matunda na mboga mbichi. Matokeo yalikuwa kupungua kwa uzito wa pauni 8 na kushuka kwa shinikizo la damu kwa 18 mmHg. Kwa kupita tu, watafiti walibaini kwamba asilimia 80 ya wale waliokuwa wakivuta sigara au kunywa pombe waliacha kwa hiari.

Waliripoti pia kuongezeka kwa sensitivity kwa pombe, moshi wa sigara, harufu za kemikali na dawa. Baadhi yao walipata kichefuchefu, kutapika na hali mbaya baada ya kula chakula cha kawaida cha migahawa au karamu. [291]

Ni aina gani ya lishe ilikuwa hiyo? Lishe ya awali!

“Na Mungu akasema, Tazama, nimewapa kila mche utoao mbegu, ulio juu ya uso wa nchi yote, na kila mti, ambao matunda yake yana mbegu; vitakuwa chakula chenu.” “...nawe utakula mimea ya kondeni.” [292] “Nafaka, matunda, karanga na mboga huunda lishe tuliyochaguliwa na Muumba wetu. Vyakula hivi, vikitayarishwa kwa njia rahisi na ya asili kadiri iwezekanavyo, ndivyo vyenye afya na lishe zaidi. Hutoa nguvu, uwezo wa kustahimili na uchangamfu wa akili ambao haupatikani kwa lishe ngumu zaidi na yenye kuchoche.” [293]

KWA NINI KULA SANA?

“Na uweke kisu kooni mwako, ikiwa wewe ni mtu mwenye tamaa ya kula.” [294] Shinikizo la damu huongezeka kwa kula kupita kiasi. [295] [296] Usile kupita kiasi! “...kula kwa wakati wake, kwa nguvu, wala si kwa ulevi!” [297] Kula chakula kidogo (caloric restriction) hupunguza ugumu wa mishipa, huboresha kulegea kwa mishipa na hupunguza shinikizo la damu. [298] [299]

Hatua nyingine ni kufunga. Kufunga kumeonyeshwa kuwa njia inayoweza kusaidia kupunguza shinikizo la damu. Unaweza kuanzisha kupungua kwa shinikizo la damu kwa kufunga maji tu. [300] Kufunga kunaweza kupunguza shinikizo la damu linalokataa kushuka. [301]

Kufunga siku moja au mbili kwa wiki kunaweza kuwa na ufanisi zaidi kuliko vidonge. [302]

WEKA LIMAO KWENYE MAJI YAKO!

Kwa kuwa dehydration ni mojawapo ya sababu za shinikizo la damu, [303] njia bora ya kupata maji ni ipi? Kuongeza maji ya limao mapya huongeza athari yake dhidi ya shinikizo la damu. [304]

Tunapendekeza ukamue juisi ya limao moja kwenye lita ya kwanza ya maji ya siku hiyo na unywe angalau dakika 30 kabla ya kifungua kinywa ili kupunguza shinikizo la damu.

Tunapendekeza maji yawe ya uvuguvugu, si ya moto wala baridi.

TACHYCARDIA: MAPIGO YA MOYO YALIYOONGEZKA

Moyo unapopiga kwa kasi, damu nyingi zaidi husukumwa na shinikizo la damu huongezeka. [305] Hii huitwa **tachycardia**. Kitu chochote kinachoongeza resting heart rate huongeza hatari ya shinikizo la damu. Kwa kila ongezeko la mapigo 10 kwa dakika, hatari ya shinikizo la damu huongezeka kwa asilimia 42. [306] Kwa kawaida wanariadha wana mapigo ya moyo ya chini sana. Watu ambao hawafanyi mazoezi huwa na mapigo ya moyo ya juu na hatari kubwa ya shinikizo la damu. Stress pia huongeza mapigo ya moyo.

JE, STRESS INAENDESHWA NDANI YA DAMU YAKO?

Je, unashtuka kwa urahisi? Hii ni sehemu ya mwitikio wako kwa stress na inaweza kuwa ishara ya awali kwamba unaelekea kwenye shinikizo la damu. [307] Mbali na kuongeza mapigo ya moyo na kubana mishipa, stress husababisha shinikizo la damu na kuganda kwa damu kwa kufanya damu kuwa nzito zaidi, hivyo kuhitaji shinikizo kubwa zaidi kusukuma kupitia mishipa. [308]

Watu ambao hawapati anxiety wana kiwango kidogo zaidi cha shinikizo la damu. [309] “Basi msisumbukie ya kesho; kwa maana kesho itajisumbukia yenyewe. Yatosha siku kwa uovu wake.” [310] Kwa mtazamo mwingine, watu wanaokabiliana na matukio yenye msongo kwa ufanisi zaidi wanafanikiwa zaidi kudumisha shinikizo la kawaida. [311] Hii inaweza kuhusiana na personality. Watu wa aina B, ambao ni watulivu, huwa na shinikizo bora kuliko watu wa aina A. [312] Mwitikio wa maisha ulio mtulivu na relaxed hutabiri shinikizo la kawaida. [313]

Watu wenye hasira ndogo hupata shinikizo la damu lililotulia zaidi [314] na mashambulizi machache ya moyo. [315] “Yeye asiye mwepesi wa hasira ni bora kuliko shujaa; naye aitawalaye roho yake kuliko yeye atekae mji.” [316] Zaidi ya hayo, watu wenye furaha na uchangamfu huwa na shinikizo la damu la chini. [317]

Una matatizo ya kukabiliana na stress?

Mafunzo ya kudhibiti stress, ikiwa ni pamoja na kupunguza hostility na kudhibiti hasira, yameonekana kusaidea kupunguza shinikizo la damu. [318] Je, kuwa na mnyama wa kufugwa husaidia shinikizo la damu? Ndiyo, wanyama wapendwa wa kufugwa wanaweza kuwa na athari ya kupunguza shinikizo la damu kwa watu wenye shinikizo la damu. Bila shaka, stress inahusiana na namna unavyotafsiri hatari, si hatari yenyewe. Watu wanaoona matukio kama mabaya wana hatari kubwa ya shinikizo la damu. [319]

Swali ni: ninawezaje kuepuka au kushinda stress? Ninawezaje kubadilisha mtazamo wangu wa hatari kutoka hasi kwenda chanya?

Hatua ya kwanza ni kutambua wakati stress inahusika katika maisha yako.

Je, mapigo yako ya moyo yanaongezeka? Je, mwili wako huwa na mvutano? Je, una maumivu ya kichwa au anxiety? Je, una wasiwasi? Je, uchovu unakufuata? Je, una shinikizo la damu?

Kuwa na ufahamu wa hisia zako ni muhimu kwa sababu stress ni uzoefu wa kihisia.

Unapogundua kwamba una stress, hatua inayofuata ni kutambua mawazo yanayoambatana nayo.

Kisha tathmini uhalali wa mawazo hayo. Je, yana mantiki? Je, ni hasi au chanya?

Baada ya kutambua mawazo yaliyo chini ya hisia zako za stress, hatua inayofuata ni kutambua imani zilizo nyuma ya mawazo hayo.

Imani huzaa mawazo, mawazo huzaa hisia, na hisia huendesha vitendo au tabia kama shinikizo la damu. Chunguza kwa karibu imani zako zilizofichika, hasa zile zilizo nyuma ya hisia za stress.

Mara nyingi utagundua imani zinazokuandaa kwa hofu, wasiwasi au hasira zisizo na sababu.

Unahitaji kuzichallenge imani hizo na kuzibadilisha kwa imani zenye mantiki. “Na mtaifahamu kweli, nayo hiyo kweli itawaweka huru.”[320] Imani zinazoweza kukusaidia zaidi kupata afya njema ni zile zinazopatikana katika Biblia, ambapo tunajifunza kwamba: “Katika pendo hamna hofu; lakini pendo lililo kamili huitupa nje hofu; kwa maana hofu ina adhabu...”[321] Hofu moja inayosababisha stress ni hofu ya kushindwa kifedha. Lakini tunapoweka maisha yetu mikononi mwa Mungu, tunaweza kutegemea utunzaji wake: “Basi nawaambia, Msisumbukie maisha yenu, mtakula nini; wala mwili wenu, mtavaa nini. Maisha ni zaidi ya chakula, na mwili ni zaidi ya mavazi... Bali utafuteni ufalme wake, na hayo mtazidishiwa.” [322] Watu wanaoweka yaliyopita nyuma yao, bila kuendelea kutafakari matukio yaliyowakasirisha, huwa na hatari ndogo ya shinikizo la damu na matatizo yake. [323] “...nikiyasahau yaliyo nyuma, nikiyachuchumilia yaliyo mbele, nakaza mwendo...” [324]

MATUKIO YA MAISHA YENYE STRESS

Njia moja ya kuongeza stress ni kuupa akili yako picha na ujumbe wa televisheni.

Kutazama televisheni kwa saa mbili kwa siku huongeza hatari ya shinikizo la damu kwa asilimia 40. [325] Kama unavyojua, mhusika mkuu wa simulizi mara nyingi huwa katika matatizo, anaingia matatizoni au anatoka kwenye matatizo—wakati maisha halisi si lazima yawe mabaya kiasi hicho. Ugumu wa kulipa gharama za matibabu umehusishwa na ongezeko la shinikizo la damu. [326] Pia umetajwa kuwa sababu kuu ya kufilisika nchini Marekani. [327]

RAHA YA KAZI

Faida za kuwa na kazi yenye maana na yenye kukuletea kipato zinastahili kutajwa.

Watu wanaofurahia kazi zao na mapato yao wana uwezekano mkubwa wa kuwa na shinikizo la damu lenye afya. [328] [329] Watu wanaofurahia kazi zao, hawafanyi kazi kupita kiasi na hawana depression huwa na shinikizo la damu la chini. [330]

Kuwa na kusudi katika maisha husaidia kudhibiti shinikizo la damu. [331]

RAHA YA KIJAMII

Kwa upande wa kijamii, watu wenye marafiki wa karibu na wanaowaunga mkono huwa na shinikizo la damu la chini. [332] Kwa kweli, kushiriki tukio baya la maisha na rafiki asiye na msimamo kunaweza kuongeza shinikizo la damu na mapigo ya moyo.

Kinyume chake, kushiriki tukio hilo na rafiki mwenye kujali na anayekuunga mkono hupunguza shinikizo la damu na mapigo ya moyo. Vivyo hivyo, viwango vya shinikizo la damu huwa chini zaidi mtu akiwa na familia na juu zaidi akiwa miongoni mwa watu asiowajua. [333]

NGUVU YA WANYAMA WA KUFUGWA

Je, kufuga mnyama husaidia shinikizo la damu?

Ndiyo. Wanyama wapendwa wa kufugwa wanaweza kuwa na athari ya kupunguza shinikizo la damu kwa watu wenye hypertension. [334]

MUJIZA WA MUZIKI

Je, unapenda kusikiliza muziki?

Muziki unaweza kusaidia shinikizo la damu. [335]

Shinikizo la damu hujibu vizuri kwa muziki wa classical, lakini si jazz au pop. [336]

HATARI MPYA YA MIJINI

Mazingira yana nafasi kubwa katika stress. J

Unahamia mjini? Tarajia ongezeko la pointi 23 katika systolic blood pressure na pointi 9 katika diastolic blood pressure. [337] Kusafiri kwenda mjini pia kuna hatari.

Uchafuzi wa hewa unaohusiana na magari na kelele huongeza kwa kiasi kikubwa hatari ya shinikizo la damu. [338] Watu wanaoishi katika miji midogo ya vijijini wana nusu ya hatari ya shinikizo la damu ikilinganishwa na watu wanaoishi katika miji mikubwa yenye viwanda. [339]

UTULIVU WA VIJINI

Utulivu, upweke na ukimya hutuliza mishipa ya fahamu na kupunguza shinikizo la damu. [340] [341] “Nyamazeni, mkajue ya kuwa mimi ni Mungu.” [342]

Watu wanaoishi mahali ambapo kelele za barabara zenye shughuli nyingi hazifiki masikioni mwao wana hatari ya shinikizo la damu iliyo chini kwa asilimia 37. [343]

Kutembea nje na kufurahia miti, maua na maajabu mengine ya uumbaji wa Mungu hupunguza shinikizo la damu na stress. [344] Hata kuleta mazingira ya nje ndani ya nyumba kwa kuweka mimea ya ndani kumeonyeshwa kuboresha shinikizo la damu. [345] [346]

RAHA YA MAISHA: KUSAIDIA WENGINE

Ikiwa una muda wa ziada na unataka kufanya jambo lenye manufaa kwa shinikizo lako la damu, kujitolea kusaidia wengine ni msaada mzuri katika kudumisha shinikizo la kawaida. [347]

Mtafute mtu mwingine anayehitaji msaada na ujitoe kwa mahitaji ya ulimwengu.

“Ni heri kutoa kuliko kupokea.” [348]

UHURU KUTOKA HATIA NA CHUKI

Hatua ya hatia na resentment husababisha shinikizo la damu. [349][350]

Uhuru kutoka kwenye hatia na resentment hupunguza shinikizo la damu.

Sawa, ninawezaje kufanya hivyo?

Ni rahisi kusema kuliko kutenda!

Kwa kweli si jambo unaloweza kufanya peke yako. Utahitaji msaada. Ni Mungu pekee anayeweza kulitimiza hili, kwa ushirikiano wako.

Uko tayari?

Hatia inatokana na dhambi.

“Dhambi ni uvunjaji wa sheria.”[351]

Ni kuwa nje ya maelewano na Mungu mwenye upendo wa asili na ulimwengu.

Huenda tayari una hisia kwamba kuna kitu hakiko sawa na kwamba unahitaji amani zaidi katika maisha yako.

Nitajuwaje kama nina hatia?

Kuna njia mbili:

1. Linganisha maisha yako na kiwango cha sheria takatifu ya Mungu [352] na uone kama kuna tofauti kati ya ulivyo na kile sheria inachoamuru:

“Kwa maana kwa sheria huja kuijua dhambi.”[353]

Nenda kwenye sheria, soma amri ya kwanza na mwombe Mungu akuonyeshe kama unaishi kwa maelewano nayo.

Kisha endelea na amri zinazofuata na uulize swali hilo hilo.

2. Linganisha maisha yako na maisha ya Yesu Kristo, “Ambaye hakutenda dhambi.”[354]

Maisha yake ni mfano wa jinsi ilivyo kuwa katika amani kamili na Mungu na kutunza sheria yake bila hatia.

Soma wasifu wa Yesu mwanzoni mwa Agano Jipya—Mathayo, Marko, Luka na Yohana—na mwombe Mungu akuonyeshe tofauti kati ya maisha unayosoma na maisha ambayo ungeweza kuwa nayo kama ungekuwa kama Yesu.

Hii ni njia nyingine ya kulinganisha maisha yako na kile sheria inachoamuru na kugundua mahali ambapo huenda umetenda dhambi.

Ikiwa baada ya kufanya hivi unaamini kwamba huna tatizo, huenda umefanya ulinganisho kwa juu juu sana na unahitaji muda zaidi.

Uchunguzi wa kina utaonyesha kwamba:

“Wote wamefanya dhambi, na kupungukiwa na utukufu wa Mungu.”[355]

Na:

“Tukisema kwamba hatuna dhambi, twajidanganya wenyewe, wala kweli haimo mwetu.”[356]

Roho Mtakatifu wa Mungu atakusaidia na dhamiri yako itaamshwa kuona ubaya wa dhambi, nguvu yake na hatia yake.

Dhambi humtenganisha mtu na Mungu na amani na kumweka katika utumwa.

Huleta hisia za hatia ambazo husababisha dalili za kimwili kama shinikizo la damu.

Kadiri unavyojaribu kujinasua mwenyewe, ndivyo unavyogundua udhaifu wako.

“Ni amani unayohitaji—msamaha wa Mbinguni, amani na upendo moyoni. Pesa haiwezi kuinunua, akili haiwezi kuipata, hekima haiwezi kuifikia; huwezi kamwe kutumaini kuipata kwa juhudi zako mwenyewe. Lakini Mungu anakupa kama zawadi...”[357]

Ungama dhambi zako na uziondoe moyoni.

Unaweza kusema:

“Mungu mpendwa, nimetenda dhambi na nimepata matokeo ya hisia za hatia na nina ugonjwa wa shinikizo la damu. Tafadhali nisamehe na nipe moyo mpya wa kukujua na kuishi bila kosa kwako na kwa wengine.”

Amua kujitoa kwa Mungu.

“Basi nenda kwake na umwombe aoshe dhambi zako na akupe moyo mpya. Kisha amini kwamba anafanya hivyo kwa sababu ameahidi...”[360]

Ili kudumisha amani na uhuru kutoka kwenye hatia inayoongeza shinikizo la damu:

“Pigana vita vilivyo vizuri vya imani,”[358]

amini kwamba Mungu ameshughulikia dhambi zako za zamani, soma Neno lake kila siku ili ujifunze mambo mapya yatakayokusaidia kuzuia hatia inayoongeza shinikizo la damu, na:

“...nikaze mwendo kuelekea mede ya thawabu ya mwito mkuu wa Mungu katika Kristo Yesu.”[359]

“...kwa hao ambao kwa saburi katika kutenda mema wanatafuta utukufu na heshima na kutokufa, watapata uzima wa milele.”[360]

Pumzika katika uhakika wa uzima wa milele na maisha mazuri yajayo.

RESENTMENT

Resentment hutokana na kutokuelewana kati ya watu. Hutokana na kutomsamehe mtu mwingine, Ni aina ya hasira.

Resentment hukua ikiwa haishughulikiwi. Usiruhusu jeraha kuoza na baadaye kulipuka kwa maneno yenye sumu yanayochafua akili za wanaoyasikia.

Usiruhusu mawazo machungu yaendeleo kujaza akili yako.

“Usijilipize kisasi, wala usiwe na kinyongo... bali umpende jirani yako kama nafsi yako; Mimi ndimi BWANA.”[361]

Nenda kwa ndugu yako, na kwa unyenyekevu na uaminifu zungumza naye kuhusu jambo hilo.

“Na ndugu yako akikukosa, enenda ukamwonye, wewe na yeye peke yenu...” [362]

Katika hatua hii, umefanya sehemu yako, bila kujali matokeo.

Chagua kumwachia Mungu hisia za resentment na bitterness, na ujaze akili yako kwa maneno ya furaha kutoka katika vitabu vya Biblia kama Zaburi au Mithali.

UVUMILIVU NA MSAMAHA HUPUNGUZA SHINIKIZO LA DAMU

Watu wanaokuza tabia ya uvumilivu huwa na shinikizo la damu la kawaida zaidi. [363] Hii inanikumbusha kifungu muhimu sana katika kitabu cha mwisho cha Biblia:

“Hapa ndipo penye saburi ya watakatifu; hao wazishikao amri za Mungu, na imani ya Yesu.” [364]

Roho ya msamaha imeonyeshwa kupunguza shinikizo la damu. [365] “...mkisameheana, kama Mungu katika Kristo alivyowasamehe ninyi.”[366]

DINI, KUJIFUNZA BIBLIA NA MAOMBI HUPUNGUZA SHINIKIZO LA DAMU

Katika hali zenye stress, maombi yameonyeshwa kupunguza shinikizo la damu. [367]

Zaidi ya hayo, watu wanaohudhuria ibada [368] na kuomba au kujifunza Biblia mara kwa mara wana hatari ya shinikizo la damu iliyo chini kwa asilimia 40. [369] Watu waliobadilisha uzoefu wa kidini wa moja kwa moja na mawasiliano ya kijamii na waumini wengine kwa kutazama au kusikiliza vyombo vya habari vya kidini walikuwa na shinikizo la damu lililoongezeka. [372]

Watu wengi huona vita na majanga ya asili kama vimbunga na matetemeko ya ardhi kuwa yenye stress. Baada ya matetemeko ya ardhi na majanga mengine yanayosababisha stress, watu wengi zaidi hupata shinikizo la damu. [370] “Kwa maana taifa litaondoka kupigana na taifa, na ufalme kupigana na ufalme; na kutakuwa na matetemeko ya nchi mahali mahali, na kutakuwa na njaa na taabu; hayo ndiyo mwanzo wa utungu.”[371] Kwa maneno mengine, bado hujaona kila kitu.

Tunapokaribia kuja kwa mara ya pili kwa Yesu Kristo, mambo haya yatazidi kuwa ya kawaida.

Udhibiti wa stress unahitaji kuwa unatokana na Mungu ili kukabiliana na uharibifu unaoweza kutokea.

JE, UPENDO HUDUMU MILELE?

Tayari tumezungumzia athari za matukio makubwa yenye stress katika maendeleo ya shinikizo la damu.

Tukio moja kubwa kama hilo ni kumpoteza mpendwa.

Utafiti kutoka University of Michigan, Ann Arbor, ulionyesha kwamba watu wazee waliompoteza mpendwa kwa kifo lakini wanaoamini katika maisha mazuri baada ya kifo walikuwa na uwezekano mdogo sana wa kupata shinikizo la damu. [372] Hili linaibua swali muhimu: Je, tuna sababu ya kuamini katika maisha mazuri baada ya kifo? Kama sivyo, wote tunaelekea kupata shinikizo la damu. Lakini ukweli kuhusu maisha baada ya kifo ni upi?

Yesu alisema wazi kwamba baada ya kuondoka duniani angeenda kuandaa mahali kwa ajili yetu:

“Msifadhaike mioyoni mwenu; mnamwamini Mungu, niaminini na mimi. Nyumbani mwa Baba yangu mna makao mengi... Naenda kuwaandalia mahali. Basi mimi nikienda kuwaandalia mahali, nitakuja tena niwakaribishe kwangu; ili nilipo mimi, nanyi mwepo.”[373]

Tutajiunga naye lini?

“Kwa maana Mwana wa Adamu atakuja katika utukufu wa Baba yake pamoja na malaika zake; ndipo atakapomlipa kila mtu kwa kadiri ya matendo yake.”[374]

Atamlipa kila mtu wakati wa kuja kwake mara ya pili.

Atajuaje nani apewe thawabu nzuri na nani asiingizwe?

“...Bwana Yesu Kristo, atakayewahukumu walio hai na waliokufa wakati wa kutokea kwake na wa ufalme wake...”

“...imewekwa akiba kwa ajili yangu taji ya haki, ambayo Bwana, mwamuzi mwenye haki, atanipa siku ile; wala si mimi peke yangu, bali na wote pia waliopenda kufunuliwa kwake.”[375]

Mungu hufanya uamuzi huo katika mazingira ya hukumu. [376]

Kwa mtazamo wa maandishi haya, hukumu na thawabu bado havijatolewa; vinahusishwa na kuja kwake mara ya pili.

Paulo pia anangojea siku hiyo ili apokee “taji ya haki”.

Wote waliokufa na walio hai, wema na waovu—bado wanasubiri hukumu na thawabu.

Vipi kuhusu wale ambao tayari wamekufa?

Yesu alisema:

“Msistaajabu kwa hilo; kwa maana saa yaja, ambayo watu wote waliomo makaburini wataisikia sauti yake. Nao watatoka; wale waliofanya mema kwa ufufuo wa uzima, na wale waliotenda mabaya kwa ufufuo wa hukumu.”[377]

Kwa hiyo, kulingana na mafundisho haya, Yesu bado hajawafufua wafu ili wapokee thawabu zao.

Wafu wanafanya nini sasa?

Je, ninaweza kuzungumza na mmoja wao? Je, atanikumbuka?

Daudi anasema kwamba mwanadamu hana fahamu katika kifo:

“Pumzi yake hutoka, yeye hurudi katika nchi yake, Siku hiyo mawazo yake yapotea.”[378]

“Maana katika mauti hakuna kukukumbuka; Katika kuzimu ni nani atakayekushukuru?”

“Wafu hawamsifu BWANA, wala wote washukao kwenye kimya.”[379]

Sulemani pia anasema:

“Kwa sababu walio hai wanajua ya kwamba watakufa; lakini wafu hawajui neno lo lote...”

“Pendo lao, na chuki yao, na wivu wao, vimepotea...”

“...hakuna kazi, wala shauri, wala maarifa, wala hekima, katika kuzimu uendako.”[380]

Ufufuo utatokea lini?

“Kwa maana twawaambia haya kwa neno la Bwana, kwamba sisi tulio hai, tutakaosalia hata wakati wa kuja kwake Bwana, hakika hatutawatangulia wale waliolala. Kwa sababu Bwana mwenyewe atashuka kutoka mbinguni pamoja na mwaliko, na sauti ya malaika mkuu, na parapanda ya Mungu; nao waliokufa katika Kristo watafufuliwa kwanza. Kisha sisi tulio hai, tuliosalia, tutanyakuliwa pamoja nao katika mawingu, ili tumlaki Bwana hewani; na hivyo tutakuwa pamoja na Bwana milele. Basi farijianeni kwa maneno hayo.”[381]

Hilo ni jambo la kufariji na husaidia kuleta shinikizo zuri la damu.

Hata Ayubu wa Agano la Kale alijua kuhusu ufufuo huu wa baadaye:

“Mtu akifa, je! Atakuwa hai tena? Siku zote za vita yangu nitasubiri, hata zije siku za kufanywa upya kwangu. Wewe utaita, nami nitakujibu; utaitamani kazi ya mikono yako.”[382]

Ni mabadiliko gani Ayubu aliyokuwa akitarajia katika ufufuo?

Paulo anatupa jibu:

“...kwa dakika moja, kufumba na kufumbua, wakati wa parapanda ya mwisho; maana parapanda italia, na wafu watafufuliwa wasiwe na uharibifu, nasi tutabadilika. Maana sharti huu uharibikaji uvae kutokuharibika, nao huu wa kufa uvae kutokufa...”

“...Mauti imemezwa kwa kushinda.”

“Ewe mauti, ku wapi kushinda kwako?”

“...Shukrani kwa Mungu, atupaye kushinda kwa Bwana wetu Yesu Kristo. Basi, ndugu zangu wapendwa, mwimarike, msitikisike, mkazidi sana kutenda kazi ya Bwana siku zote, kwa kuwa mwajua ya kuwa taabu yenu si bure katika Bwana.”[383]

Ikiwa wewe ni mwaminifu kwa Mungu, una ahadi ya mwili mpya wakati Yesu atakaporudi, mwili ambao hautakuwa na magonjwa kama shinikizo la damu.

Matokeo ya hukumu wakati wa kuja kwa Yesu mara ya pili, kulingana na mafundisho haya, ni kwamba wenye haki huenda mbinguni na waovu kwenda jehanamu.

Kwa baadhi ya watu ufufuo ni mwanzo wa maisha ya furaha baada ya kifo.

“Na wengi wa hao walalao katika mavumbi ya nchi wataamka, wengine wapate uzima wa milele, wengine aibu na kudharauliwa milele.”[384]

Je, adhabu ya wale wanaokataa msamaha na rehema ya Mungu ni ipi?

Je, jehanamu ni ya milele?

Kufikiria kuhusu jehanamu ni jambo la kutisha, na wazo la kuhukumiwa kwenda huko linaweza kuongeza shinikizo la damu.

“Ndipo atawaambia na wale walioko mkono wake wa kushoto, Ondokeni kwangu, mliolaaniwa, mwende katika moto wa milele aliowekewa tayari Ibilisi na malaika zake.”[385]

Jehanamu haikukusudiwa wewe wala mimi. Ilikusudiwa Ibilisi na malaika zake wanaompinga Mungu.

Lakini tukijiunga na Ibilisi katika dhambi, tukipigana dhidi ya sheria ya Mungu yenye haki, tunachagua kujiunga na Ibilisi katika hatima yake.

Kwa kweli, Mungu angetenda tutubu na kuchagua njia yake:

“Bwana... huvumilia kwenu, maana hapendi mtu ye yote apotee, bali wote wafikilie toba.”[386]

Je, waovu watateseka katika moto wa jehanamu milele?

“Kwa maana, angalieni, siku ile inakuja, ikawaka kama tanuru; na wote wenye kiburi, naam, na wote watendao uovu, watakuwa mabua; na siku ile inayokuja itawateketeza...”[387]

Kwa hiyo, kulingana na tafsiri hii, ingawa ni tukio la kutisha, adhabu hiyo ina mwisho; kila kitu kinabaki majivu.

Mathayo anasema:

“...ataichoma kabisa makapi kwa moto usiozimika.”[388]

Yatachomwa kabisa!

Je, jambo kama hili limewahi kutokea?

Ndiyo:

“...Sodoma na Gomora, na miji iliyokuwa kando yake... imewekwa kuwa mfano, ikiangukiwa na hukumu ya moto wa milele.”[389]

Miji hiyo ilitateketezwa, na leo haiendelei kuwaka. Kwa hiyo, “moto wa milele” katika tafsiri hii unaeleweka kama moto wenye matokeo ya milele.

Vipi kama wapendwa wangu watachagua maisha yanayowaongoza jehanamu? Je, jambo hilo halitakuwa akilini mwangu milele?

Hapana:

“Na Mungu atafuta kila chozi katika macho yao.”[390]

“Kwa maana, tazama, mimi naumba mbingu mpya na nchi mpya; na mambo ya kwanza hayatakumbukwa, wala hayataingia moyoni.”[391]

Je, Mungu ataondoa kabisa huzuni, maumivu na shinikizo la damu?

“Mtawaza nini juu ya BWANA? Yeye atafanya mwisho kabisa; mateso hayatainuka mara ya pili.”[392]

Wale wasiochagua njia na sheria za Mungu watakuwa:

“...kana kwamba hawakuwako.”[393]

Lakini wenye haki watafurahia kuwa pamoja na Yesu na kula matunda ya Mti wa Uzima ambao majani yake ni kwa ajili ya uponyaji:

“...mti wa uzima... uliozaa matunda ya namna kumi na mbili... na majani ya mti huo ni ya kuwaponya mataifa.”[394]

Labda hata uponyaji wa shinikizo la damu.

Tunajua kwamba hakutakuwa na ugonjwa mbinguni:

“Na Mungu atafuta kila chozi katika macho yao; wala mauti haitakuwapo tena; wala maombolezo, wala kilio, wala maumivu hayatakuwapo tena; kwa kuwa mambo ya kwanza yamekwisha kupita.”[393]

Ni siku ya ajabu itakayokuwa!

Je, huisubiri kwa hamu—uhuru kamili kutoka kifo, huzuni, kilio na maumivu?

Je, uko tayari kuponywa?

REVIEW NA MUHTASARI

Shinikizo la damu hutokana na kusukuma kwa moyo, ukubwa wa mishipa ambayo damu inapita, unene wa damu na kiasi cha damu kinachopaswa kusukumwa.

Mapigo ya moyo ya haraka husukuma damu nyingi kuliko kawaida na huongeza shinikizo la damu. Hii huitwa **tachycardia**.

Sababu za kawaida za tachycardia ni stress, kutokuwa na fitness nzuri ya moyo na mishipa, caffeine, tumbaku na dehydration.

Mishipa ya damu inapobana na kufanya ukubwa wa njia ya damu kuwa mdogo, shinikizo kubwa zaidi huhitajika kupeleka damu inayohitajika mahali inapokwenda.

Hii huitwa **vasoconstriction**.

Vasoconstriction husababishwa na stress ya kisaikolojia na kimwili, baridi, caffeine, tumbaku na dehydration.

Mishipa ya damu kwa kawaida hupanuka na kulegea kwa kila mpigo wa moyo. Ikiwa mishipa inakuwa migumu, ugumu wake hupinga mtiririko huru wa damu na shinikizo huongezeka.

Atherosclerosis ni mfano wa mchakato huu, pamoja na glycation ya sukari, endothelial dysfunction na ugumu wa mishipa inayopita kwenye misuli kutokana na maisha ya kukaa bila shughuli.

Ikiwa damu inakuwa nzito na yenye kunata, shinikizo kubwa zaidi huhitajika kuisafirisha kupitia mishipa na shinikizo la damu hutokea.

Damu inapokuwa nzito, tunasema viscosity imeongezeka kupita kiasi.

Vitisho vinavyoweza kuongeza unene wa damu ni dehydration, kula kupita kiasi, stress ya kisaikolojia, lishe yenye mafuta mengi na carbohydrates zilizokobolewa, pamoja na cholesterol au triglycerides nyingi.

Ikiwa mishipa ya damu inabanwa na kitu kutoka pembeni, athari ni kama kuweka kidole gumba mwisho wa bomba la bustani; shinikizo huongezeka.

Hii huitwa **external compression**.

Vitu vinavyoweza kubana mishipa ni uvimbe wa tishu, atherosclerotic plaque, glycation ya sukari (mara nyingi kutokana na kisukari), inflammation na hasa mavazi yanayobana kama mikanda na elastic.

Hatimaye, kiasi cha damu kinapongezeka, damu nyingi zaidi huingia moyoni, ambayo husababisha moyo kusukuma damu nyingi zaidi kwa kila mpigo na hivyo kuongeza shinikizo la damu.

Hali hii mara nyingi huitwa **fluid retention**.

Tabia za mtindo wa maisha zinazoweza kusababisha volume overload ni kula chumvi nyingi, unene kupita kiasi, kutofanya mazoezi, mikono na miguu kuwa baridi kwa sababu ya mavazi yasiyotosha, na kushindwa kwa figo.

MUHTASARI: KUIACHA HYPERTENSION!

- Dumisha maji ya kutosha mwilini kwa kunywa maji safi; unaweza kuongeza kiasi kidogo cha juisi ya limao mbichi.
- Tenga muda wa kufanya mazoezi ya kufurahisha mara kwa mara nje, mbali na magari, uchafuzi wa hewa, miji na makundi yenye stress.
- Pata mwanga wa jua wa kutosha na hewa safi.
- Kula lishe nzuri ya vyakula kamili visivyosindikwa na vya mimea; yenye fiber, madini, vitamini na antioxidants nyingi, na chumvi kidogo; epuka carbohydrates zilizokobolewa, mafuta yaliyosindikwa na bidhaa za wanyama ambazo sura hii inazihusisha na shinikizo la damu.
- Epuka tumbaku, caffeine, pombe, dawa za kulevya, vyakula vya kukaanga, fructose nyingi, sodium nyingi, MSG na kula kupita kiasi.
- Fanya udhibiti wa uzito kuwa tabia.
- Linda usingizi wako na tathmini ubora wake.

- Mwambie Mungu kwamba unamhitaji akuondolee stress, hatia, hofu na shinikizo la damu.
- Mtegemee Mungu akuongoze unapozidi kuishi kulingana na mpango wake wa awali kuhusu lishe na mtindo wa maisha.

Kwa mawazo zaidi kuhusu jinsi ya kutumia kanuni ulizojifunza katika maisha yako ya kila siku, tazama sura yenye kichwa, “Ninawezaje Kutumia Kanuni za Afya katika Maisha Yangu ya Kila Siku?”

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