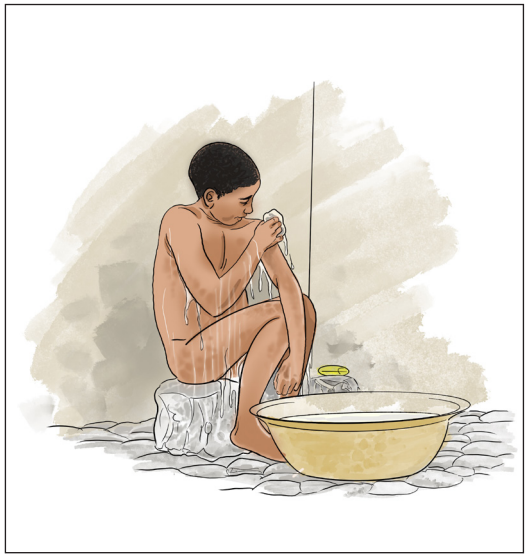
MAKADI OPELEKERA UPHUNGU OKHUDZA NGODYA ZISANU ZOTHANDIZIRA KUTI CHAKUDYA CHIKHALE CHOSAMALIKA KOMANSO CHAUKHONDO M'MALAWI



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MAU OTSOGOLERA

Kuonongeka kwa chakudya likadali vuto lalikulu lomwe likupitilizabe kuyambitsa matenda ndikupha anthu ambiri makamaka m'madera amene ali ovutika kupeza zipangizo zogwilitsa ntchito posamalira zakudya.

Vuto limeneli ndi lalikulu kwambiri mmadera monga athu ano komwe nyengo yotenthera imalimbikitsa kuti tizilombo toyambitsa matenda tizikula bwino ndipo ana ndi amene amakhudzika kwambiri ndi vutoli.

Pofuna kuthana ndi vutoli, Bungwe Lowona za Umoyo Padziko Lonse Lapansi (WHO) lidapanga ngodya zisanu za mmene chakudya chingasamalidwire zomwe zimaphunzitsa kuti anthu akhale akuchita ukhondo wa zakudya, pathupi komanso pakhomo, kusaphatikiza zakudya zophika ndi zosaphika, kuphika zakudya moyenera, kusunga zakudya moyenera komanso kugwiritsa ntchito madzi ndi zinthu zina zabwino popanga zakudya zina. Ngakhale mfundo zimenezi zili zamphamvu kwambiri, kuzichita m'midzi ndi m'madera mwathumu nkovuta kwambiri kamba kakuti tilibe zipangizo kapena zinthu zambiri zothanirana ndi vutoli. Zikhalidwe ndi zikhulupiriro zina zimalepheretsanso kuti tikwaniritse mfundo zimenezi.

Makadi a uphunguwa apangidwa kuti kusamala chakudya kukhale kophweka komanso kotheka kwa ophunzitsa a ku Malawi. Makadiwa atenga mfundo zomwe Bungwe Lowona za Umoyo Padziko Lonse Lapansi (WHO) lidapanga ndikuzilumikizitsa ndi m'mene ife timachitira zinthu zathu kuti zigwirizane ndi chikhalidwe chathu monga kulingalira njira za m'mene tingasungire zakudya pomwe tilibe chipangizo monga choziziritsira zakudya (fridge). Khadi lirilonse liri ndi mafunso kuti athandize ophunzira kuganiza mozama ndikumvetsetsa kuti ndi chifukwa chiyani mfundozo zili zofunika, zomwe zimathandiza ophunzirawo kuti azikumbukira ndikumagwiritsa ntchito mfundozi m'moyo wawo wa tsiku ndi tsiku.

Tonse pamodzi tikhoza kuthandizana kukwaniritsa kukhala ndi maanja a thanzi ndi chakudya chabwino (chosamalika) kwa aliyense.

ZOLINGA NDI KAGWIRITSIDWE NTCHITO KA MAKADIWA

Zolinga za makadi opelekera uphunguwa

- Kuthandiza ophunzitsa kuti akhale ndi luso la m'mene angalimbikitsire ophunzira kuti azitenga nawo gawo pa zokambirana pomwe maphunzirowa ali mkati ndi cholinga chokuti alandire maphunzirowa moyenera.
- Kuthandiza ophunzitsa ndi ophunzira kuti amvetsetse zomwe zimayambitsa, kuopsa komanso kapewedwe ka matenda akudza kamba kakudya chakudya choonongeka.
- Kuthandiza kukwaniritsa kagwiritsidwe ntchito koyenera ka ngodya zisanu zothandizira kuti chakudya chikhale chaukhondo komanso chosamalika zomwe Bungwe Loona za Umoyo Padziko Lonse Lapansi (WHO) limalimbikitsa.

Kagwiritsidwe ntchito ka makadiwa

Cholinga cha makadiwa ndi kulimbikitsa zokambirana pakati pa ophunzitsa ndi ophunzira. Wogwiritsa ntchito makadiwa asalankhule yekha ngati akuphunzitsa ana ang'onoang'ono a sukulu, koma achite mokambirana ndi munthu yemwe akumuuza mauthenga a mu makadiwa.

Malangizo kwa ophunzitsa

- Gwiritsani ntchito zithunzi zokhazo zimene zikugwirizana ndi zokambirana za tsikulo.
- Nyamulani makadiwa moti anthu omwe mukukambirana nawo azitha kuwona zinthuzi bwino lomwe.
- Afunseni omwe mukukambirana nawo zomwe akuwona. Mvetserani mayankho awo. Afunseni ngati zomwe zikuchita pa zithunzizo zimachitika mudera lawo.
- Onetsetsani kuti ophunzira akutengapo mbali pa zokambirana zonse.

Mfundo zotsogolera

- Kumbuyo kwa chithunzi chili chonse kwalembedwa mfundo zikuluzikulu zoti zikukumbutseni zoyenera kunena pa nthawi yomwe mukukambirana. Musawerenge mfundozi, koma kambiranani.
- Pomaliza pa zokambirana zanu afunseni ophunzira zomwe iwo aphunzirapo ndi zomwe angathe kupanga.

ZIMENE ZILI M'MAKADIWA

Makadiwa akupereka uphungu ovomelezeka omwe uli otheka komanso kutsatidwa mosavuta ndi chikhalidwe chathu polimbikitsa mfundo zisanu zopititsira patsogolo ukhondo ndi kasamalidwe ka chakudya m'madera amene ali ovutika kupeza zipangizo zogwilitsa ntchito posamalira zakudya.

Magawo a phunziroli

Makadi amaphunziro a kasamalidwe ka chakudya pogwiritsa ntchito ngodya zisanu agawidwa mzigawo zisanu ndi ziwiri ndipo tikakumana tiziphunzira uthenga ofunikira omwe tidzikagawana ndi anthu a kunyumba zomwe timaziyang'anira.

Maphunziro ake ndi awa:

Phunziro 1: Luso lokambirana

Phunziro 2: Kumvetsetsa za matenda odzera mu zakudya

Phunziro 3: Ngodya yoyamba: Chitani ukhondo

Phunziro 4: Ngodya yachiwiri: Osaphatikiza zakudya zophika ndi zosaphika

Phunziro 5: Ngodya yachitatu: Phikani mokwanira

Phunziro 6: Ngodya yachinayi: Sungani chakudya mosamalika

Phunziro 7: Ngodya yachisanu: Gwiritsani ntchito madzi ndi zakudya za ukhondo

Zotsatira za Maphunzirowa

Pomaliza pamaphunzirowa ophunzira adzatha:

a. Kuonetsa luso lokambirana polimbikitsa kumasukirana polankhulana.

b. Kudziwa m'mene matenda odzera mu chakudya amayambira, kuyipa kwake, ndi njira zopewera matendawa.

c. Kutsatira njira zoyenera za ukhondo wa pathupi lamunthu komanso pakhomo, njira zoyenera zosiyanitsira zakudya zophika ndi zosaphika kale, njira zophikira chakudya moyenera, milingo yakutentha yoyenera yosungira chakudya ndi kufotokoza ubwino ndi kufunika kogwiritsa ntchito madzi ndi zakudya za ukhondo pokonza chakudya.

1. LUSO LOKAMBIRANA

Funsani

Mvetserani

Pezani vuto

Kambilanani za vutolo

Perekani mfundo zoyenera

Mangani chimodzi

Konzani ndondomeko yokumananso kuti muone ngati vuto latha

LUSO LOKAMBIRANA

1

Gawo ili likuonetsa ndondomeko yoyenera kutsatidwa kuti zokambirana zichitike moyenera.

Cholinga cha phunziro

Kuphunzitsa ophunzira za luso lokambirana kuti akathe kuphunzitsa ena za kasamalidwe ka chakudya molingana ndi ngodya zisanu zosamalira chakudya.

Zotsatira za phunziro

Pomaliza pa phunziroli, ophunzira adzakhala ndi luso la kutsogolera zokambilana, kumvetsera mwachidwi, kuthandizana pakuthetsa mavuto komanso ukadaulo otsogolera zakakonzedwe ndi kasungidwe kabwino kachakudya potsatira ngodya zisanu.

Ndondomeko zoyenera kutsatira pamene mukukambirana zili motere:

1. Yambani ndikuwalandira ophunzira komanso malonje (kudziwana).
2. Perekani mwayi kwa ophunzira kuti afunse mafunso komanso afotokoze zokhoma zomwe ali nazo. Alimbikitseni kuti akhale omasuka.
3. Aloreni ophunzira kupeleka maganizo awo mosasokonezedwa. Onetsetsani kuti mukumvetsera mwatcheru.
4. Athandizeni ophunzira afotokoze mavuto akuluakulu omwe amakumana nawo.
5. Tsogolerani zokambirana za njira zomwe zilipo zothanirana ndi mavutowo.
6. Gawanani ndi ophunzira ndondomeko zina zomwe zilipo zothanirana ndi mavutowo ndipo aloreni ophunzira kuti asankhe ndondomeko zomwe angakwanitse kutsatira.
7. Alimbikitseni ophunzira za ndondomeko zomwe asankha powalola kuti azitchule ndi pakamwa pawo.
8. Konzani maulendo okaona ngati zomwe mudagwirizana zikuchitika.

Zoyenera kuchita pa nthawi yophunzitsa

Alimbikitseni ophunzira kuyesera ma luso a zokambilana pogwilitsa ntchito nkhani zosiyana siyana. Izi nzothandiza kuti akhale olimba mtima popereka uphungu kwa ophunzira ena.

2. KUMVETSETSA ZA MATENDA ODZERA MU ZAKUDYA

KUMVETSETSA ZA MATENDA ODZERA MU ZAKUDYA 2

2.1 KODI MATENDA ODZERA MUZAKUDYA NDI CHIYANI?

Matenda odzera mu zakudya ndi vuto la dziko lonse chifukwa:

- Amakhudza anthu tsiku ndi tsiku ndikuyambitsa matenda.
- Amayambitsidwa ndi tizilombo toopsa toyambitsa matenda komanso ziphe (poizoni).
- Ndi opeweka potsatira njira zabwino za kasamalidwe ka chakudya.

Mafunso otsogolera zokambirana

1. Kodi munakhudzidwapo ndi matenda odzera mu zakudya?
2. Mukuganiza kuti kusamalira zakudya ndikofunika bwanji m'dera lanu?
3. Tchulani zinthu ziwiri zimene zimayambitsa matenda odzera mu zakudya.

Mayankho a mafunso otsogolera zokambirana

1. Ophunzira anene zomwe akudziwa zokhudza matenda odzera mu zakudya monga zizindikiro, zoyambitsa komanso m'mene munthu wodwala matendawa angachilire.
2. Ophunzira apereke maganizo awo pa zakufunika kwa kusamalira zakudya m'dera lawo monga kupewa matenda, kuteteza anthu omwe chitetezo cha mthupi mwawo ndi chochepa ndi kuteteza chuma.
3. Zinthu ziwiri zomwe zimayambitsa matenda odzera mu zakudya ndi tizilombo toopsa komanso ziphe.

Mvetsetsani za matenda odzera mu zakudya kuti muthe kusamalira bwino chakudya ndi kuchepetsa chiopsezo cha matendawa.

2.2 ZOTSATIRA ZA MATENDA ODZERA MU ZAKUDYA

2.2 ZOTSATIRA ZA MATENDA ODZERA MU ZAKUDYA

Matenda odzera mu zakudya amadzetsa:

- Chipsinjo kuntchito za umoyo ndi kusamalira anthu.
- Amakhudza kwambiri anthu omwe chitetezo cha mthupi mwawo ndichochepa monga ana, achikulire komanso anthu odwala.
- Chipwirikiti cha matenda otsekula m'mimba ndi kunyetchera.
- Chipsinjo ku ntchito za chuma mdziko ndikulepheretsa ntchito za malonda ndi mayiko ena.

Mafunso otsogolera zokambirana

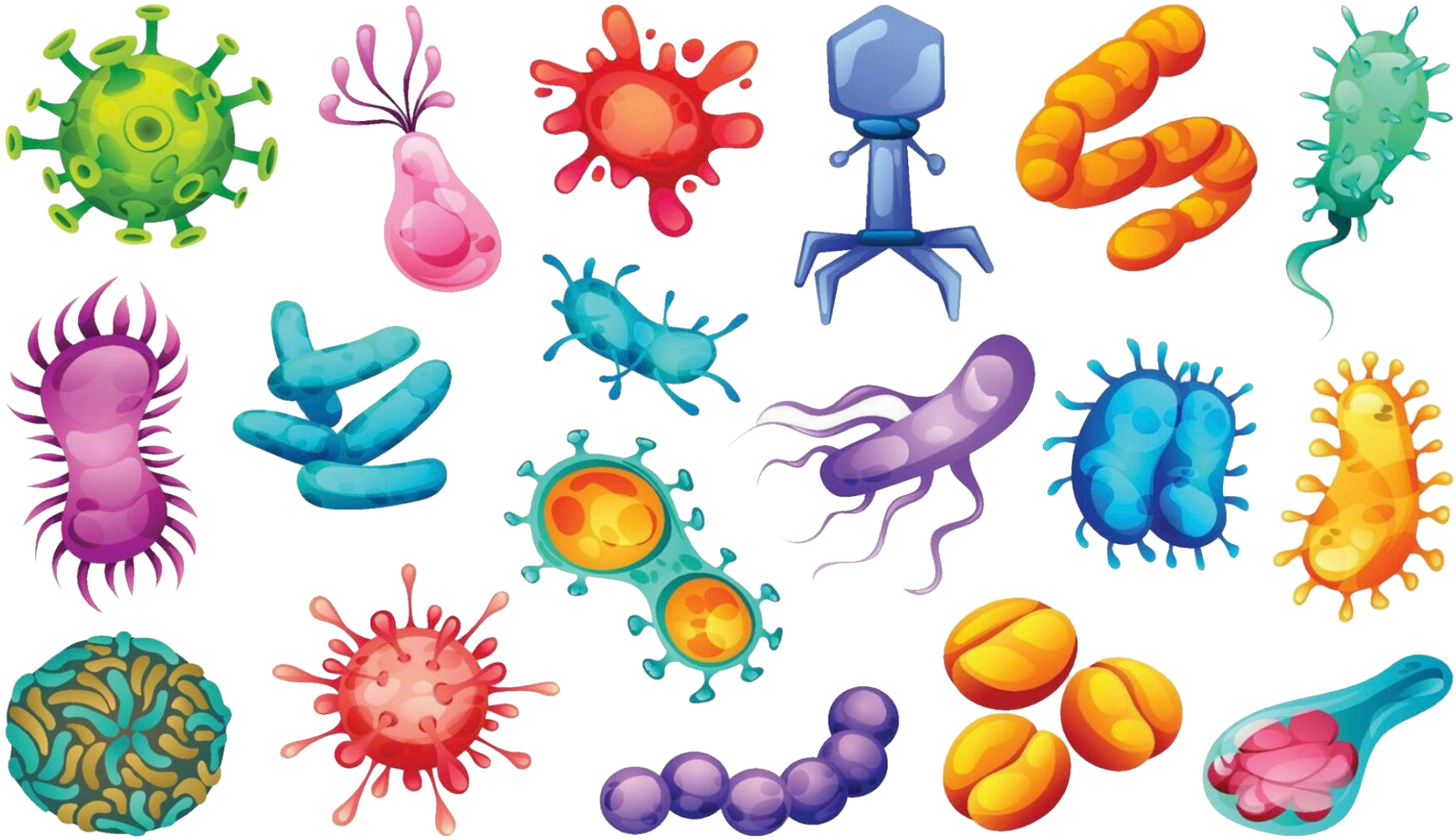
1. Kodi matenda odzera mu zakudya amakhudza bwanji ntchito za umoyo ndi zosamalira anthu m'dera lanu?
2. Kodi anthu a m'dera angathandize bwanji anthu omwe akhudzidwa ndi matenda odzera mu zakudya?
3. Kodi ndi magulu ati a anthu amene amakhudzidwa kwambiri ndi matenda odzera mu zakudya?
4. Kodi matenda odzera mu zakudya amakhudza bwanji chuma cha dziko?

Mayankho a mafunso otsogolera zokambirana

1. Ophunzira apereke maganizo awo za m'mene matenda odzera muzakudya amapsinjira ntchito za umoyo pochulukitsa chiwerengero cha odwala ndi zinthu zofunika pothandizira odwalawo.
2. Ophunzira apereke maganizo awo pa m'mene anthu amdera angathandizire anthu okhudzidwa ndi matenda odzera mu zakudya powaphunzitsa, kuwapatsa mwayi wopeza thandizo la zaumoyo komanso kuwaphunzitsa ndondomeko zoyenera zosamalira zakudya.
3. Magulu a anthu amene amakhudzidwa kwambiri ndi matenda odzera mu zakudya ndi ana, okalamba komanso anthu odwala.
4. Matenda odzera mu zakudya amakhudza chuma chadziko polepheretsa malonda a zakudya ndi mayiko ena komanso poyika chipsinjo ku ntchito za umoyo ndi kusamalira anthu.

Zindikirani zotsatira za matenda odzera mu zakudya kuti mumvetsetse kufunika kosamalira chakudya.

2.3 TIZILOMBO TING'ONOTING'ONO TOSAONEKA NDI MASO: TABWINO, TOYIPA NDI TOOPSA



2.3 TIZILOMBO TING'ONOTING'ONO TOSAONEKA NDI MASO: TABWINO, TOYIPA NDI TOOPSA

Tizilombo ting'onoting'ono tosaoneka ndi maso ndi monga:

- **Tizilombo tabwino:** Timathandiza pokonza zakudya (monga tchizi, yogati) ndi mankhwala monga penisilini.
- **Tizilombo toyipa:** Sitiyambitsa matenda koma timaononga zakudya ndikusintha kakomedwe kake.
- **Tizilombo Toopsa:** timayambitsa matenda omwe nthawi zina amatha kubweretsa imfa. Zitsanzo za tizilomboti ndi monga:
    - **Ma bakiteriya:** Salmonella, E. coli
    - **Ma parazayiti:** Giardia, Trichinella
    - **Ma viyirasi:** Hepatitis A, Norovirus

Mafunso otsogolera zokambirana

1. Maganizo anu ndi otani pa kufunika kwa tizilombo tosaoneka ndi maso pa makonzedwe a chakudya?
2. Perekani zitsanzo ziwiri za tizilombo tating'ono ting'ono tomwe tili tabwino.
3. Tchulani tizilombo tating'onoting'ono titatu tomwe timayambitsa matenda odzera ku zakudya.

Mayankho a mafunso otsogolera zokambirana

1. Ophunzira apereke maganizo awo pazammene tizilombo ting'onong'ono timathandizira kukonza zakudya monga panthawi yopunthika chakudya komanso afotokoze mmene tizilomboti timathandizira kuti chakudya chikhale chosamalika.
2. Tizilombo tabwino ndi monga yisiti (amene amagwiritsidwa ntchito popanga buledi komanso pophika thobwa) ndi bakiteriya monga *lakito basilasi* (amene amagwiritsidwa ntchito popanga yogati ndi zakudya zina).
3. Tizilombo toopsya tating'onoting'ono titatu tomwe timayambitsa matenda ndi ma bakiteriya monga *Salmonella* ndi *E. coli*, ma parazayiti monga *Giardia* ndi *Trichinella* komanso ma vayirasi monga *Hepatitis* A ndi *Norovirus*.

Mvetsetsani za tizilombo tosiyanasiyana tating'ono ting'ono tosaoneka ndi maso kuti mupange zisankho zoyenera zosamalira zakudya.

2.4 MALO OMWE TIZILOMBO TATING'ONOTING'ONO TOSAONEKA NDI MASO TIMAPEZEKA KOMANSO MAYENDEDWE AKE

2.4 MALO OMWE TIZILOMBO TATING'ONOTING'ONO TOSAONEKA NDI MASO TIMAPEZEKA KOMANSO MAYENDEDWE AKE

Tizilombo tating'onoting'ono tosaoneka ndi maso timapezeka paliponse makamaka kudzera:

- M'manja a anthu kunyamula tizilomboti kuchoka malo osiyanasiyana omwe agwira ndikutifikitsa mu chakudya panthawi yokonza kapena yakudya.
- M'madzi ndi chakudya choonongeka.
- Mwa anthu omwe ali ndi tizilomboti kutifikitsa mu chakudya panthawi yomwe akukonza kapena kudya chakudya.

Mafunso otsogolera zokambirana

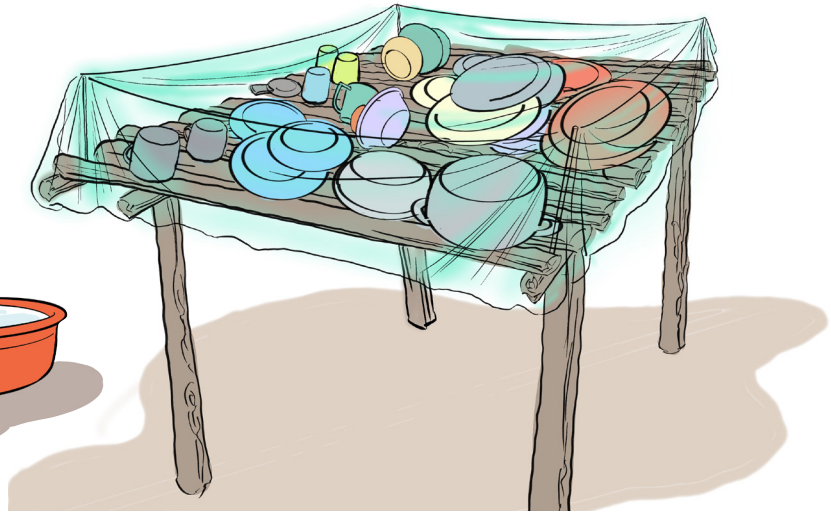
1. Kodi tizilombo tating'onoting'ono tosaoneka ndi maso timayenda bwanji kuchoka malo ena kupita malo ena?
2. Tchulani malo atatu omwe tizilombo tating'onoting'ono tosaoneka ndimaso toyambitsa matenda tingapezeke?

Mayankho amafunso otsogolera zokambirana

1. Tizilombo tating'onoting'ono tosaoneka ndi maso timayenda kudzera m'manja a anthu kunyamula tizilomboti kuchoka malo osiyanasiyana omwe agwira ndikutifikitsa mu chakudya panthawi yokonza.
2. Tizilombo tating'onoting'ono tosaoneka ndi maso timapezeka mu chimbudzi, dothi, madzi, pa thupi laziweto ndi anthu.

Chitani ukhondo pokonza chakudya kuti muchepetse chiopsezo cha matenda odzera mu zakudya.

NGODYA ZISANU ZOTHANDIZIRA KUTI CHAKUDYA CHIKHALE CHOSAMALIKA



NGODYA ZISANU ZOTHANDIZIRA KUTI CHAKUDYA CHIKHALE CHOSAMALIKA KOMANSO CHAUKHONDO M'MALAWI

Pewani kuti inu ndi anthu ena tizilombo tikudwalitseni potsatira ngodya zisanu zothandizira kuti chakudya chikhale chosamalika komanso chaukhondo.

1. Chitani ukhondo
2. Osaphatikiza zakudya zophika ndi zosaphika
3. Phikani mokwanira
4. Sungani chakudya mosamalika
5. Gwiritsani ntchito madzi ndi zakudya zina zukhondo pokonza zakudya zina

Ndi kofunika kwambiri kutsatira ngodya zisanu zimenezi chifukwa kasamalidwe ndi kakonzedwe ka chakudya koyenera kamathandiza kupewa matenda akudza kamba kakudya chakudya choonongeka

Mauthenga amenewa ndi ofunikira kwambiri ndipo akuyenera kufika kwa munthu aliyense.

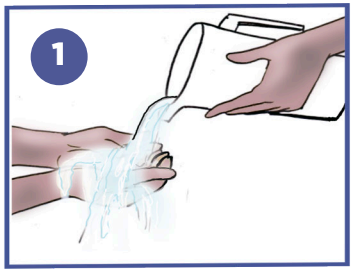
Mdziko muno , nkofunika kwambiri kuthana ndi vuto la kugwiritsa ntchito madzi ndi zakudya zina zoonongeka popangira zakudya zina tisadayambe kufotokozera za ngodya zisanu zothandizira kuti chakudya chikhale chosamalika komanso chaukhondo.

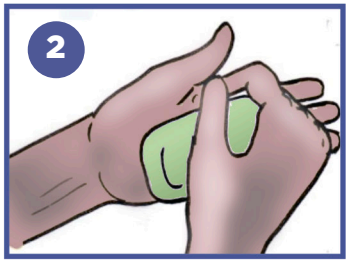
1 NGODYA 1 : CHITANI UKHONDO

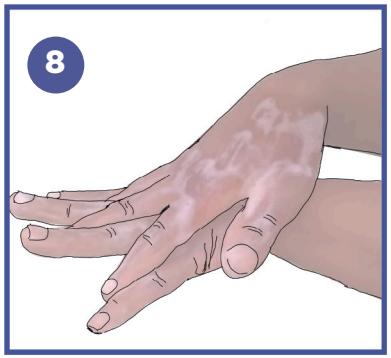
Kufunika kwake: Ngakhale tizilombo tambiri sitiyambitsa matenda, tizilombo toopsa zedi timapezeka kwambiri mu dothi, madzi, pa thupi la ziweto komanso la anthu. Tizilombo timeneti timakhala mmanja, tinsalu topukutira mmanja kapena ziwiya, podulira zakudya ndipo kukhudzana kwapang'ono chabe kwa tizilomboti ndi zakudya kumayambitsa matenda kwa amene wadya chakudyacho .

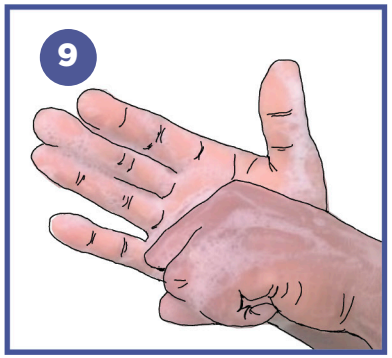
Zoyenera kuchita (titani?)	Tichite motani?
Sambani mmanja mu nthawi izi 1. Musanagwire kapena musanadye chakudya ▪ Musanagwire chakudya komanso pa nthawi imene mukukonza chakudya ▪ Musanadye ▪ Musanayamwitse mwana ndi kufinyira mkaka wammawere. 2. Mukagwira madzi ena ali onse ochoka mthupi kapena zonyasa zili zonse ▪ Mukachoka ku chimbudzi ▪ Mukasintha mwana thewera ▪ Mukamina ▪ Mukasintha mapadi ▪ Mukayetsemula kapena kukhosomola 3. Mukagwira zipangizo zomwe zili ndikuthekera kokhala ndi tizilombo toyambitsa matenda. ▪ Mukagwira nyama yayiwisi kapena nyama za mgulu la mbalame ▪ Mukagwira zinyalala kapena manyowa ▪ Mukagwira mankhwala kuphatikizapo omwe mwagwilitsa ntchito kutsukila ziwiya kapena malo okonzera zakudya. 4. Mukasewera ndi ziweto ▪ Mukasewera kapena kupha ziweto kuphatikizapo za mgulu la mbalame. 5. Mukagwila ziwalo monga mphuno, nkamwa ndi tsitsi	Nyowetsani m'manja pa madzi a pampopi kapena okuthirirani. Pakani sopo ndipo nyukutani m'manjamo kwa masekondi osachepera makumi awiri (20). Onetsetsani kuti m'makadabo, mchikhato, komanso m'mipata mwa zala mwatsukidwa bwino. Tsukuluzani bwinobwino pamadzi a pa mpopi kapena othirirana. Umitsani mmanja popukuta ndi kansalu koyera bwino kapena kutumulani manja kuti muwumitse ndi mphepo. Osabwerekana kansalu kopukutira m'manja.

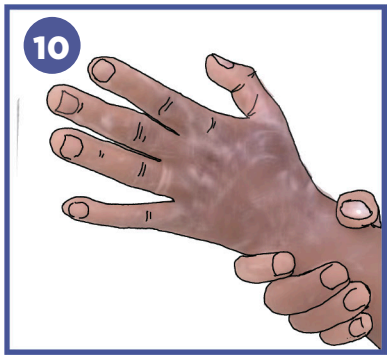
Ndondomeko yakasambidwe ka m’manja

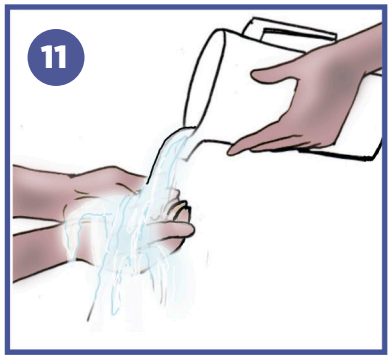












KEY 1: CHITANI UKHONDO

Mafunso otsogolera zokambirana

1. Kodi tizilombo toyambitsa matenda timachoka bwanji kumanja kupita pa chakudya?
2. Ndi chifukwa chiyani kugwiritsa ntchito madzi a pampopi kapena othirirana ndi njira yabwino kwambiri kusambira m'manja kusiyana ndikusambira m'mbale kapena m'beseni osathirirana?
3. Ndi njira ziti zomwe anthu angagwiritse ntchito kuti asambe m'manja ngati madzi a pa mpopi palibe?
4. Kugwiritsa ntchito sopo kapena zinthu monga phulusa, zimathandiza bwanji kuti ukhondo utheke posamba m'manja?
5. Kusamba m'manja musanayamwitse mwana kumakhudza bwanji umoyo wathanzi wa mwana?
6. Fotokozani kufunika kosamba m'manja tikachoka kuchimbudzi?
7. Ndi zinthu ziti zomwe munthu ayenera kuchita pomwe akugwira nyama kapena ziweto za mgulu la mbalame kuti ukhondo wa m'manja utheke?
8. Kodi kasambidwe ka m'manja koyenera kangalimbikitsidwe bwanji mmakomo ndi m'madera osiyanasiyana?
9. Kodi Kusamba m'manja kumathandiza bwanji kuchepetsa kufala kwa matenda opatsirana kudzera mu chakudya?
10. Mukuganiza kwanu, ndi nthawi ziti zomwe anthu amatayirira osasamba m'manja koma zili zofunika?

Mayankho a mafunso otsogolera zokambirana

1. Tizilombo toyambitsa matenda timachoka m'manja kufika mu zakudya pomwe chakudya chagwilidwa ndi m'manja momwe simunasambidwe moyenera.
2. Madzi othirirana amakankha ndi kuchotsa litsiro ndi tizilombo m'manja pamene kusambira m'manja m'beseni kumapangitsa kuti manja atengenso litsiro ndi tizilombo tomwe tinachoka m'manjamo.
3. Ngati madzi apa mpopi palibe mukhoza kugwiritsa ntchito mpondagiya, kapena njira zina zothirirana madzi m'manja.
4. Sopo kapena phulutsa zimachotsa mafuta, tizilombo ndi dothi zomwe zingakhale m'manja kuti m'manja mukhale moyera ndi mwaukhondo.
5. Kusamba m'manja musanayamwitse mwana kumachotsa tizilombo m'manja mwa mayi tomwe tikhoza kuyambitsa matenda kwa mwana pamene mayi wagwira bele pa nthawi yoyamwitsa.
6. Kusamba m'manja tikachoka ku chimbudzi kumachotsa tizilombo tomwe tingatengedwe kuchimbudzi kufika mu zakudya kapena pa malo okonzera zakudya.
7. Sambani m'manja moyenera ndi sopo komanso madzi apampopi kapena othirirana mukagwira nyama yayiwisi kapena ziweto zili zonse za mgulu la mbalame popewa kufala kwa tizilombo toyambitsa matenda.
8. Limbikitsani kasambidwe m'manja koyenera pophunzitsa anthu za ubwino wosamba m'manja moyenera, kuonetsa ndondomeko yoyenera ya kasambidwe ka m'manja komanso kupanga zipangizo zosambira m'manja kupezeka mosavuta.
9. Kusamba mmanja kumapha kapena kuchepetsa kufala kwa tizilombo toyambitsa matenda odzera mu chakudya.
10. Nthawi zomwe anthu amakonda kutayilira osasamba m'manja koma zili zofunika ndi monga posintha mwana thewera, akamina, akakhosomola, akasintha mapadi (kansalu ka azimayi), akagwira ziweto, akagwira nyama ya nkhuku.

A

TSATIRANI UKHONDO ONSE WAPATHUPI POMWE MUKUGWIRA ZAKUDYA

A. TSATIRANI UKHONDO ONSE WAPATHUPI POMWE MUKUGWIRA ZAKUDYA

Zoyenera kuchita (Titani?)	Machitidwe ake (tichite motani?)
Sambani tsiku lilironse ndi kuvala zovala zochapa bwino.	Okonza zakudya akuyenera kumasamba tsiku lirilonse, avale zovala zochapa ndi kusitidwa bwino, komanso azikhala ndi zikhadabo zazifupi.

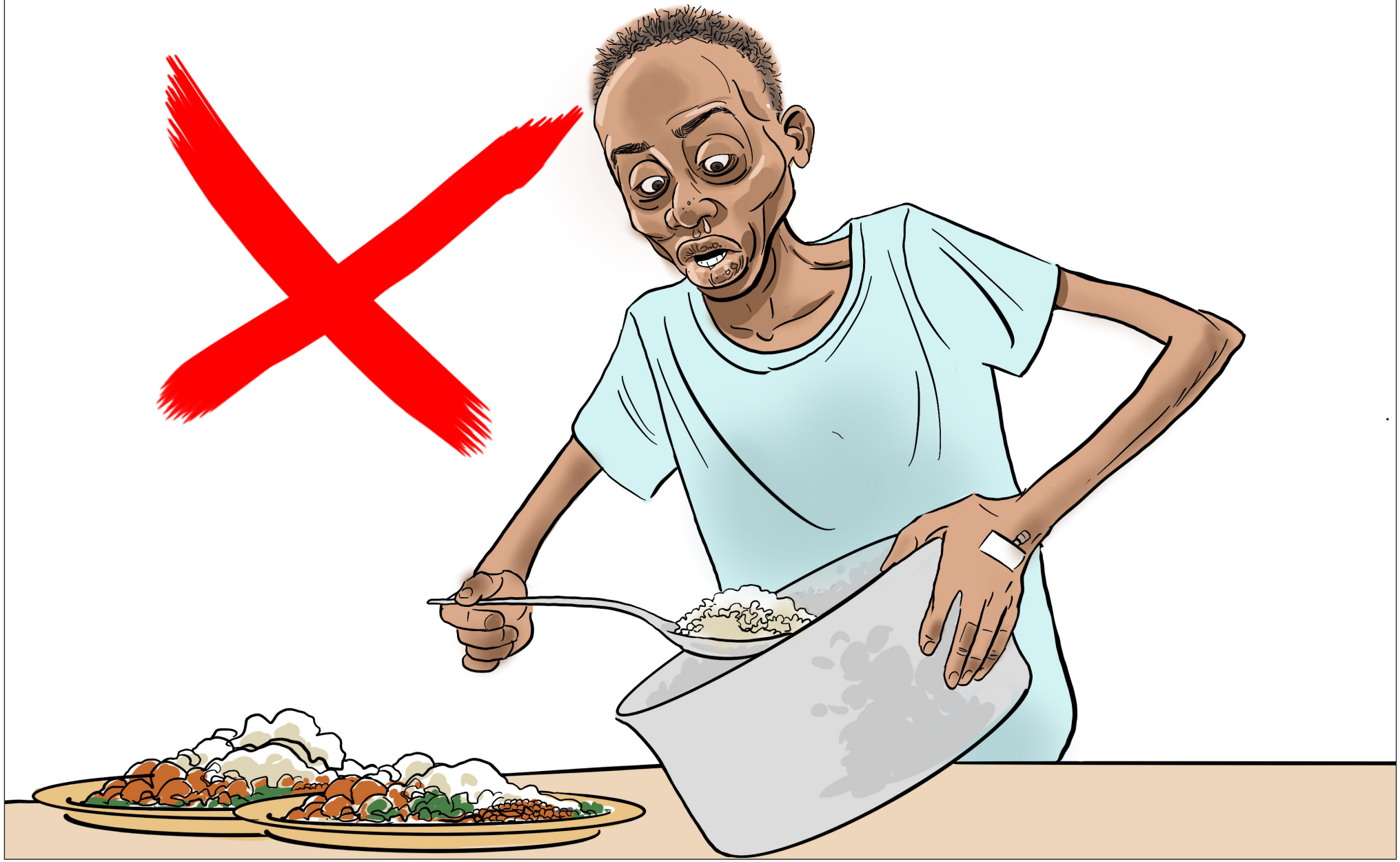
Mafunso otsogolera zokambirana

- Kusamba pafupipafupi kumathandiza bwanji kuchepetsa kufala kwa matenda akudza kamba kakudya zakudya zosasamalika?
- Ndi mavuto ati omwe angadze ngati okonza zakudya sakhala ndi zikhadabo zazifupi komanso zaukhondo?
- Ndi mavuto ati omwe anthu okonza zakudya amakumana nawo kuti akwaniritse ukhondo wawo wa pathupi?

Mayankho a mafunso otsogolera zokambirana

- Kusamba pafupipafupi kumachepetsa chiwelengero cha tizilombo timene tingachoke pathupi lamunthu ndikupita mu chakudya kukayambitsa matenda.
- Zikhadabo zazitali zimasunga litsiro ndi tizilombo tomwe tikhoza kulowa muchakudya ndikuchiononga.
- Mavuto ake ndi monga; kusowa kwa zipangizo monga sopo, madzi ndi zovala zosinthira komanso kusowa upangiri oyenera wa ukhondo wapathupi.

Musagwire kapena kugawa chakudya mukudwala



Zoyenera kuchita (Titani?)	Machitidwe ake (tichite motani?)
Pewani kukonza zakudya pamene mukudwala, makamaka ngati mukumva mphepo kapena kuphwanya kwathupi, mukutsekula m'mimba kapena kusanza, kukhosomola	Pewani kugwira ntchito pomwe mukudwala mpaka masiku awiri atatha musakuonetsa zizindikiro zodwala zilizonse.
Mangani zilonda ndi kansalu koyera bwino, kosalowa madzi komanso valani magalavu/pepala.	Tsukani chilonda chinachilichonse ndi mankhwala ndikuchimanga ndi kansalu kosalowa madzi. Valani magalavu/mapepala ndipo kumbukani kutaya bwino mukamaliza kugwiritsa ntchito kamodzi kenako valani magalavu/mapepala atsopano.

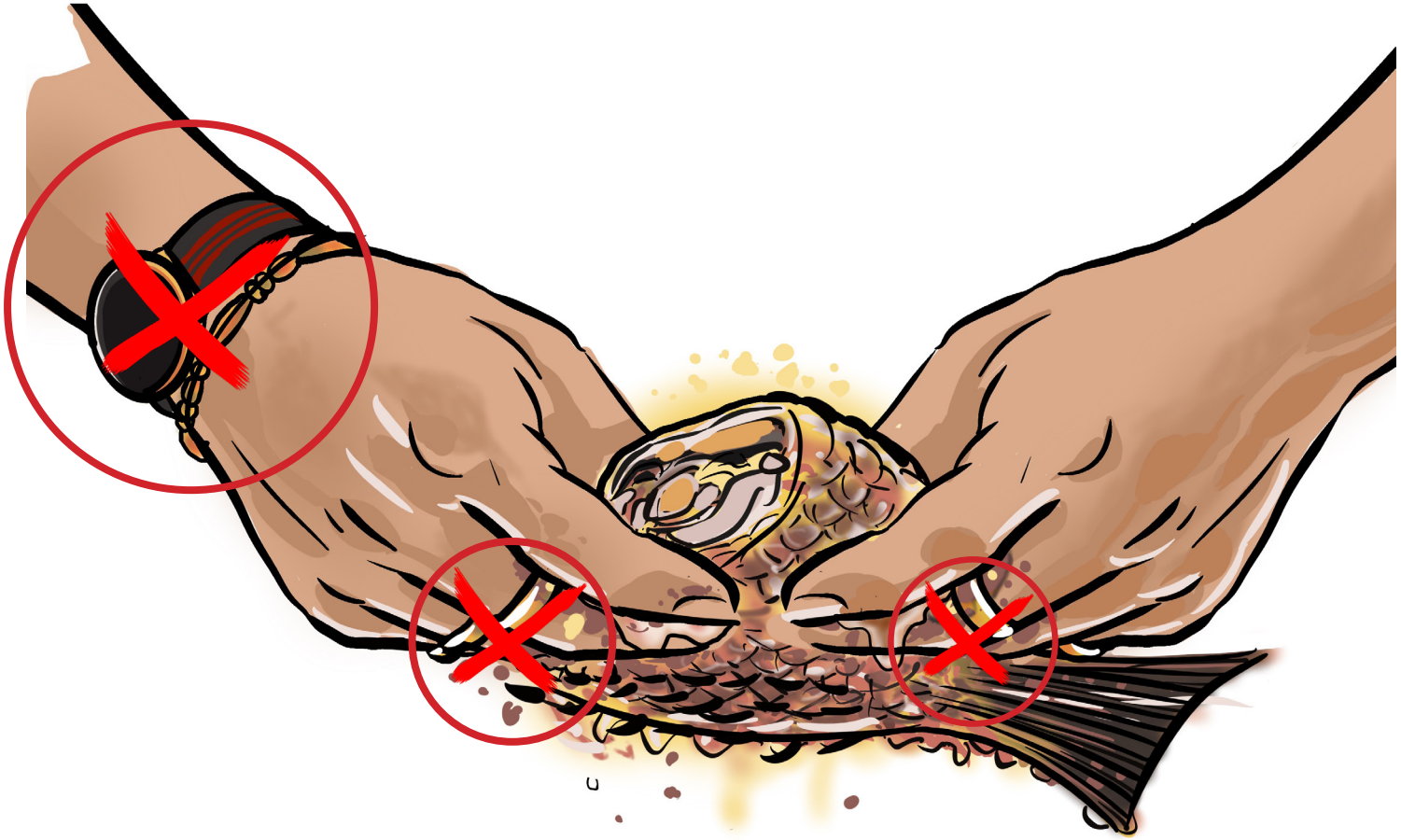
Mafunso otsogolera zokambirana

1. Ndi chifukwa chiyani ndi kosayenera kumakonza zakudya pomwe munthu akuonetsa zizindikiro za kuzizidwa ndi kutentha kwathupi komanso kusanza?
2. Ndi chiopsezo chanji chomwe chilipo chokhudza kugwira chakudya pomwe munthu ali ndi zilonda?
3. Ndi zofunika bwanji kuti munthu okonza chakudya akhale amene sanaonetse zizindikiro zodwala kwa masiku awiri?

Mayankho a mafunso otsogolera zokambirana

1. Munthu amene akuonetsa zizindikiro za kutentha kapena kuzizira kwathupi komanso kusanza akhoza kukhala ndi tizilombo toopsa tomwe tikhoza kufalikira muchakudya pa nthawi yophika ndi kuyambitsa matenda.
2. Zilonda zimakhala ndi tizilombo tomwe tikhoza kufalikira muchakudya ndi kuchiononga komanso kuyambitsa matenda.
3. Kusaonetsa zizindikiro zodwala kwa masiku awiri kumachepetsa chiopsezo chofalitsa tizilombo toyambitsa matenda, izi zili chomwechi chifukwa mu nthawiyi munthu amasonyeza kuti wachila komanso sangafalitse tizilombo.

Vulani zinthu monga zibangiri, mawotchi musanayambe kukonza zakudya



Zoyenera kuchita (Titani?)	Machitidwe ake (tichite motani?)
Osavala zinthu monga zibangiri komanso wotchi pamene mukukonza kapena kugwira chakudya	Vulani zinthu monga zibangiri komanso wotchi musanagwire kapena kukonza chakudya

Mafunso otsogolera zokambirana

1. Kuvala zibangiri kapena wotchi zimathandizira bwanji kuti chakudya chiwonongeke?
2. Anthu azikhalidwe zosiyasiyana amawuona bwanji mchitidwe wovula zibangiri asadagwire chakudya?

Mayankho a mafunso otsogolera zokambirana

1. Zibangiri kapena wotchi zimasunga litsiro ndi tizilombo toyambitsa matenda komanso zimasokoneza kusamba m'manja moyenera.
2. Zikhalidwe ndi zikhulupiliro zimapangitsa kuti anthu ena asavule zibangiri asanagwire zakudya, ena amanyalanyaza kuvula zibangiri motengera ndi zikhulupiriro zawo.

B

TSUKANI MBALE, ZIWIYA NDI MALO ONSE OKONZERA CHAKUDYA

TSUKANI MBALE, ZIWIYA NDI MALO ONSE OKONZERA CHAKUDYA

Zoyenera kuchita (Titani?)	Machitidwe ake (tichite motani?)
Tsukani mbale , ziwiya zodulirapo zakudya komanso ziwiya zina zilizonse ndi madzi otentha pafupipafupi mukamakonza zakudya	Tsukani ziwiya ndi madzi otentha komanso sopo. Ikani chidwi pa ziwiya zomwe zakhudzana ndi zakudya zosaphika. Tethetsani kapena tsukirani madzi otentha chiwiya chinachilichonse chomwe chakhudzana ndi nyama yayiwisi kapena nsomba.
Tsukani ndi madzi otentha ndi sopo ziwiya zonse zomwe mwagwiritsa ntchito mukamaliza kudya	Tayani zakudya zotsala mu dzenje lotayamo zinyalala. Tsukani ndi madzi otentha ndi sopo kapena mankhwala opha tizilombo ziwiya zonse ndi kuumitsa pokutumula kuti mphepo iwumitse kapena kupukuta ndi kansalu koyera, kouma bwino.

Mafunso otsogolera zokambirana

1. Kodi pali kusiyana Kotani pakati pa kutsuka ndi kupha tizilombo paziwiya?
2. Ndi chifukwa chiyani njira youmitsa mbale ndi ziwiya ndi mphepo ili yabwino kuyerekeza ndi njira yopukuta ndi kansalu?
3. Ndi zoopsa ziti zomwe zimadza pogwiiritsa ntchito ziwiya zomwe zinakhudzidwa ndi zakudya zaziwisi koma sizinatsukidwe ndi madzi otentha, sopo kapena mankhwala opha tizilombo?
4. Fotokozani ndondomeko yomwe ikuyenera kutsatidwa mukamatsuka ziwiya ndi madzi otentha, sopo kapena mankhwala opha tizilombo
5. Ndi chifukwa chiyani kuli kofunika kutaya zakudya mu dzenje lotayamo zinyalala musanatsuke ziwiya?

Mayankho a mafunso otsogolera zokambirana

1. Kutsuka kumachotsa litsiro, mafuta ndi tizakudya tina pogwiritsa ntchito madzi otentha ndi sopo pamene kupha tizilombo ndinjira yopheratu tizilombo tosaoneka ndimaso pogwiritsa ntchito madzi owira kapena mankhwala ophera tizilombo.
2. Kuwumitsa ndi mphepo kumapewetsa kufalikiranso kwa tizilombo kuchokera ku kansalu koputira ngati kanagwiritsidwanso ntchito kupukuta chiwiya chomwe sichinatsukidwe bwino.
3. Ziwiya zomwe sizinatsukidwe bwino zikhoza kufalitsa tizilombo toyambitsa matenda tomwe timapezeka mu zakudya zaziwisi kufalikira ku chakudya chophika kale kudzera mu ziwiyazi.
4. Ndondomeko zoyenera kutsatidwa ndi kutaya zakudya zotsala mu dzenje lotayamo zinyalala, kutsuka ziwiya ndi madzi otentha ndi sopo kapena mankhwala opha tizilombo ndi kuumitsa ziwiyazo ndi mphepo.
5. Kutaya zakudya mu dzenje lotayamo zinyalala musanatsuke ziwiya kumathandiza kuti malo otsukilamo ziwiya zisatsekere komanso kumachepetsa mlingo wa mankhwala otsukira komanso kumathandiza kuti ziwiya zitsukidwe moyenera.

Onetsetsani kuti zovala, nsalu ndi zipangizo zina zotsukira ndi kupukutira ziwiya kapena kukonzera ku kutchini ndi zoyera komanso zouma bwino.

Zoyenera kuchita (Titani?)	Machitidwe ake (tichite motani)
Onetsetsani kuti zovala, tinsalu topukutira ziwiya kapena mmanja ndi ziwiya zogwiritsa ntchito potsukira zinthu zina ndi zoyera komanso zouma	Valani zovala zochapa tsiku lilironse. Osagwiritsa ntchito chinkhupule(siponji) kutsukira ziwiya za ku khitchini. Gwiritsani tchito nsalu yakeyake pa ntchito iliyonse yomwe mukufuna kugwira mu khitchini. Onetsetsani kuti ziwiya zonse zogwiritsa ntchito kutsukira zinzake zaumitsidwa mukamaliza kugwiritsa ntchito.

Mafunso otsogolera zokambirana

1. Ndi chifukwa chiyani kuli kofunika kupewa kugwiritsa ntchito chinkhupule (siponji) potsukira ziwiya?
2. Ndi zoopsa ziti zomwe zingadze pamoyo wamunthu ngati okonza chakudya avala zovala zakuda kapena zosaumitsitsa?
3. Nsalu zopukutira ziwiya zikuyenera kumasinthidwa mowirikiza bwanji? Ndi zinthu ziti zimene zimakakamiza kuti tinsalu timeneti tisinthidwe?

Mayankho a mafunso otsogolera zokambirana

1. Chinkhupule chimasunga chinyontho chomwe chimalimbikitsa kuswana kwa tizilombo tomwe tingafalikire kuziwiya zomwe zikutsukidwa.
2. Zovala zakuda zili ndi kuthekera konyamula tizilombo tomwe tikhoza kufalikira ku chakudya pamene munthu akuchikonza.
3. Tinsalu taku khitchini tikuyenera kusinthidwa tsiku ndi tsiku. Sinthani tinsalu ngati tikuoneka takuda, tagwa pansi, mwapukutira ziwiya zomwe munayika zakudya zaziwisi.

Gwiritsani ntchito mankhwala ophera tizilombo potsuka ziwiya ndi malo okonzera zakudya

Zoyenera kuchita (Titani?)	Machitidwe ake (tichite motani)
Kupanga ndi kugwiritsa ntcito mankhwala ophera tizilombo tosiyanasiyana muziwiya.	Thirani 5ml ya mankhwala ophera tizilombo mziwiya (household bleach) m'madzi okwana 750 ml mkusakaniza bwinobwino kuti mugwiritse ntchito potsukira ndi kuphera tizilombo mziwiya, mtisalu komanso m'malo onse omwe chakudya chimakonzedwera. Dikirani kwa theka la mphindi musadayambe kutsukuluza. Ngati mankhwala ophera tizilombo muziwiyawa palibe mukhoza kunyika ziwiya zanu m'madzi owira kwa mphindi imodzi kuti muphe tizilombo kuziwiya. **Zoyenera kutsata** • Gwiritsani ntchito mankhwala ophera tizilombo amene alibe zonunkhiritsa. • Sakanizani mankhwala ophera tizilombo mu ziwiyawa pa nthawi yomwe mwatsala pang'ono kutsuka ziwiya zanu chifukwa mphamvu yake imachepa mkupita kwa nthawi. • Onetsetsani kuti muli pamalo popita mphepo mukamagwiritsa ntchito mankhwala ophera tizilombo mu ziwiyawa kuti mungamapume mpweya wa mankhwalawa.

Mafunso otsogolera zokambirana

1. Kugwiritsa ntchito makhwala ophera tizilombo muziwiya omwe mwangopanga kumene kumathandiza bwanji kupha tizilombo muziwiya?
2. Ndindondomeko iti yomwe imatsatidwa popanga mankhwala ophera tizilombo mu ziwiya zapakhomo?
3. Ndi chifukwa chiyani kuli kofunika kugwiritsa ntchito mankhwala ophera tizilombo mu ziwiya amene alibe fungo?
4. Fotokozani kufunika kodikilira kwa theka la mphindi mukathira mankhwala ophera tizilombo mu ziwiya musadayambe kutsukuluza?
5. Ngati mankhwala ophera tizilombo mu ziwiyawa mulibe , mungagwiritse ntchito njira yotani kuti mutsuke ndikupha tizilombo ku ziwiya moyenera?

Mayankho a mafunso otsogolera zokambirana

1. Mankhwala opanga kumene amakhala ndi mphamvu yokwanira kupha tizilombo.
2. Pofuna kukonza mankhwala otsukira ziwiya, thirani 5ml ya mankhwala ophera tizilombo mziwiya (household bleach) mmadzi okwana 750 ml mkusakaniza bwinobwino.
3. Pewani kugwilitsa ntchito mankhwala afungo chifukwa fungo lamankhwalawo likhoza kufalikira mu chakudya ndikuononga chakudyacho.
4. Kudikilira kwa theka la mphindi mukathira mankhwala ophera tizilombo mu ziwiya musadayambe kutsukuluza kumathandiza kuti mankhwala agwire ntchito yake moyenera (kupha tizilombo).
5. Ngat mankhwala otsukira ziwiya kuti tiphe tizilombo palibe, mukhoza kunyika ziwiya zanu mmadzi owira kwa mphindi imodzi kuti muphe tizilombo kuziwiya.

Umitsani ziwiya mukatsuka

Zoyenera kuchita (Titani?)	Machitidwe ake (tichite motani?)
Umitsani ziwiya ndi mbale padzuwa panja panyumba. Ngati sizingatheke kuumitsa panja panyumba, umitsani mchipinda moyera komanso momwe mpweya ukutha kulowamo komanso kutuluka.	Kuumitsa ziwiya padzuwa (Njira yabwino kwambiri) • Ikani thandala kapena mphasa pamalo ofika dzuwa, popanda fumbi. • Ikani mbale zanu pathandala mopendeketsa kuti zikhe madzi bwinobwino ndi kuwuma mwansanga. • Phimbirani mbale zanu ndi ka sefa kapena kansalu kopepuka kwambiri kuti mbale zisalowe fumbi kapena kuteledwa tizilombo monga ntchentche. Kuwumitsira ziwiya mchipinda (Njira ina) • Sankhani chipinda chomwe mphepo imatha kulowa ndi kutuluka makamaka pafupi ndi zenera kuti paziwala komanso mpweya uzifika. • Ikani mbale zanu pathandala powonentsetsa kuti mwasiya mpata pakati pa mbale kuti mpweya uzidutsa komanso kuti madzi azikha mosavuta. • Osaumitsira ziwiya zanu pamalo a mdima komanso achinyezi kwambiri kuti tichepetse chiopsezo cha kuswana kwa tizilombo komanso chuku pa ziwiya.

Mafunso otsogolera zokambirana

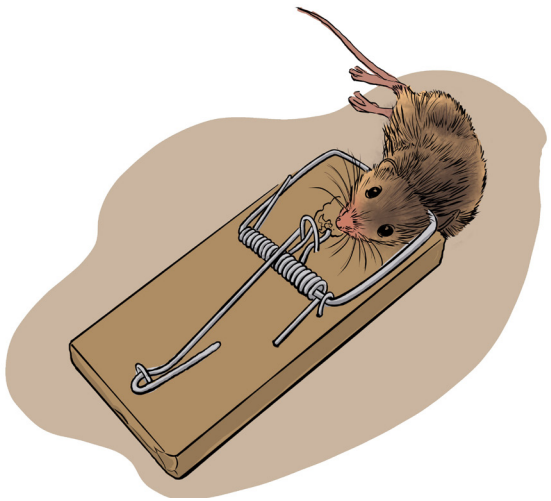
1. Kuwala kwa dzuwa kumathandiza motani ngati njira yosamalira ziwiya zathu?
2. Tiyike bwanji mbale pa thandala kuti zikhe bwino madzi komanso kuti mpweya uzidutsa bwino?
3. Ndi njira iti yomwe iyenera kutsatidwa kuti mbale zitetezeke kufumbi komanso tizilombo monga ntchentche ngati zayanikidwa panja panyumba?
4. Ngati kuumitsa ziwiya pa dzuwa sikungatheke, ndi zinthu ziti zomwe ziyenera kutsatidwa ngati mukufuna kuumitsira pa mthuzi (mnyumba)?

Mayankho a mafunso otsogolera zokambirana

1. Mphamvu yakuwala kwa dzuwa imapha tizilombo tomwe tingatsalire muziwiya zotsuka. Mphamvu ya dzuwa imathandizanso kuti ziwiya ziwume mwansanga.
2. Ikani mbale zanu pathandala mopendeketsa kuti zikhe madzi bwinobwino ndi kuwuma mwansanga.
3. Poyanika ziwiya pabwalo, phimbirani mbale zanu ndi ka sefa kapena kansalu kopepuka kwambiri kuti mbale zisalowe fumbi kapena kuteledwa tizilombo monga ntchentche.
4. Mukafuna kuwumitsa ziwiya mnyumba, sankhani chipinda chomwe mphepo imatha kulowa ndi kutuluka makamaka pafupi ndi zenera kuti paziwala komanso mpweya uzifika. Ikani mbale zanu pathandala powonentsetsa kuti mwasiya mpata pakati pa mbale kuti mpweya uzidutsa komanso kuti madzi azikha mosavuta. Osaumitsira ziwiya zanu pamalo a mdima komanso achinyezi kwambiri kuti tichepetse chiopsezo cha kuswana kwa tizilombo komanso chuku pa ziwiya .

C

TETEZANI MALO OKONZERA ZAKUDYA KU TIZILOMBO NDI ZIWETO



TETEZANI MALO OKONZERA ZAKUDYA KU TIZILOMBO NDI ZIWETO

Zoyenera kuchita (Titani?)	Machitidwe ake (tichite motani?)
Tetezani malo okonzera chakudya ku tizilombo ndi ziweto	• Vindikirani zakudya • Gwiritsani ntchito tisefa toyera mukafuna kuvindikira chakudya kuti chisateredwe ndi tizilombo. Ngati kasefa palibe gwiritsani ntchito kansalu koyera. • Tayani zinyalala kapena mikute mu ndowa zotayamo zinyalala pafupipafupi ndipo onetsetsani kuti mwavindikira ndowa zomwe mwatayamo zinyalala. Ngati ndowazi palibe, kumbani dzenje kutali ndi malo okonzera chakudya • Matani ming'alu kaya maenje onse amene ali mu chipupa cha chipinda chokonzera chakudya. • Gwiritsani ntchito nyambo kapena mankhwala opha tizilombo mosamala kuti zisafike mu chakudya ndikuchiononga. • Ziweto zisafike kumalo amene kumakonzedwera chakudya • Mangani malo okonzera ndi osungira chakudya moyenera kuti ziweto zisapeze mpata olowamo.
Onetsatsani kuti malo onse ophikira komanso mosungira chakudya ndi aukhondo mopanda tizilombo	• Tsukani ndikuthira ziwiya komanso malo onse okonzerapo chakudya mankhwala opha tizilombo pafupipafupi makamaka mukaona kuti ndikovuta kwambiri kuletseratu kuti tizilombo tisafike mu zakudya. • Onetsetsani kuti mukugwiritsa ntchito njira yoyenera yothanirana ndi mtundu wa tizilombo toononga chakudya tomwe tabuka mdera. • Gwiritsani ntchito timasefa kuti muteteze chakudya ku tizilombo towuluka

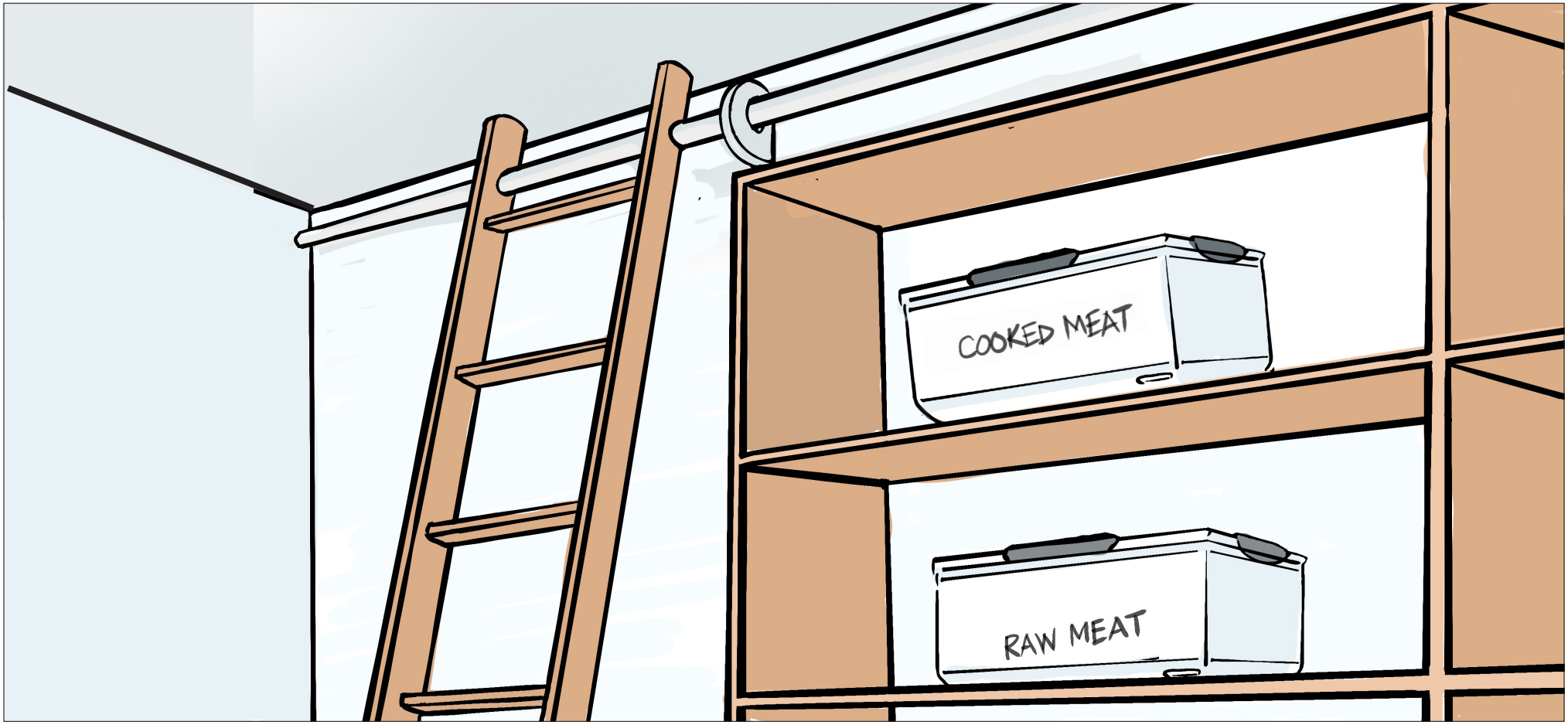
Mafunso otsogolera zokambirana

1. Kupezeka kwa tizilombo mmalo okonzera ndi kusungira zakudya kumakolezera bwanji kuononge ka kwa chakudya ?
2. Ndi njira ziti zoyenera zomwe zingathandize kutchinga tizilombo kuti tisafike mmalo okonzera ndikusungira chakudya?
3. Ndi chifukwa chiyani nkofunika kuvindikira chakudya mukamakoza kapena kuphika?
4. Ndi njira ziti zina zomwe zilipo zomwe zingagwire ntchito yofanana ndi timasefati tovindikira chakudya?
5. Tichite chiyani kuti malo otayamo zinyalala akhale osamalika ndikuti asamaitane tizilombo toyambitsa matenda?
6. Ndi chenjezo lanji lomwe liyenera kutsatidwa ngati mukugwiritsa ntchito nyambo kapena mankhwala opha tizilombo kuti chakudya chisaonongeke ndi mankhwalawo kapena nyamboyo?
7. Kodi malo okonzerapo zakudya ndi ziwiya zina ziyenera kutsukidwa ndi sopo kapena kuthiridwa mankhwala opha tizirombo mowirikiza bwanji kuti tizilombo tisakhalemo?

Mayankho a mafunso otsogolera zokambirana

1. Tizilombo timanyamula tizilombo tating'onoting'ono tomwe tikhoza kuononga chakudya ndi malo okonzera chakudya.
2. Pewani tizilombo pogwiritsa ntchito timasefa toyera mukafuna kuvindikira chakudya kuti chisateredwe ndi tizilombo. Ngati kasefa palibe gwiritsani ntchito kansalu koyera. Matani ming'alu kaya mayenje onse amene ali mu chipupa cha chipinda okonzera chakudya. Gwiritsani ntchito nyambo kapena mankhwala opha tizilombo mosamala kuti zisafike mu chakudya ndikuchiononga. Ziweto zisafike kumalo amene kumakonzedwera chakudya.
3. Kuvindikira chakudya kumateteza chakudya kuti chisateredwe ndi tizilombo tomwe tikhoza kupangitsa kuti chakudya chionongeke.
4. Ngati kasefa palibe gwiritsani ntchito kansalu koyera kuti muvindikire chakudya.
5. Onetsetsani kuti mwavindikira ndowa zomwe mwatayamo zinyalala komanso kutaya zinyalala za mu ndowamu pafupipafupi. Ngati ndowazi palibe, kumbani dzenje kutali ndi malo okonzera chakudya.
6. Gwiritsani ntchito nyambo kapena mankhwala opha tizilombo mosamala kuti zisafike malo okonzeraa ndi kusunga chakudya popeza mankhawala akhoza kuononga chakudya.
7. Tsukani komanso thirani ziwiya komanso malo onse okonzerapo chakudya mankhwala opha tizilombo pafupipafupi makamaka mukaona kuti ndikovuta kwambiri kuletseratu kuti tizilombo tisafike mu zakudya.

NGODYA 2: OSAPHATIKIZA ZAKUDYA ZOPHIKA NDI ZOSAPHIKA (ZAZIWISI)



Kufunika kwake: Zakudya zosaphika (zaziwisi) monga nyama, nsomba ndi misuzi yake zimatha kukhala ndi tizilombo toopsa tomwe timatha kufika mu zakudya zina pa nthawi yomwe chakudya chikuphikidwa kapena kusungidwa.

KEY 2: OSAPHATIKIZA ZAKUDYA ZOPHIKA NDI ZOSAPHIKA

Zoyenera kuchita (Titani?)	Machitidwe ake (tichite motani?)
Osaphatikiza zakudya zaziwisi (zosaphika) ndi zophika	• Mukamagula kapena kupeza chakudya, onetsatsani kuti zakudya zosaphika monga nyama ndi nsomba zisaphatikizidwe ndi zakudya zina (zisaikidwe pamodzi ndi zakudya zina) • Sungani zakudya mu mbale kapena timabeseni tachivindikiro kuti zakudya zophika ndi zosaphika zisakhudzane. Ngati zipangizo za chivindikiriro palibe, khazikitsani malo akeake okonzerapo chakudya chisanaphikidwe ndi enanso paokha okonzerapo chakudya chophika kale. • Gwiritsani ntchito ziwiya zomwe muli nazo (monga mbale zosiyana) kuti musaphatikize zakudya zophika ndi zosaphika.

Mafunso otsogolera zokambirana

1. Ndi chifukwa chiyani ndi zoletsedwa kutsuka nyama kuphatikizapo nyama za mgulu la mbalame mu sinki (malo otsukira ziwiya)?
2. Ndi chifukwa chiyani ndikofunika kusaphatikiza (kulekanitsa) zakudya zosaphika makamaka nyama ndi zakudya zina nthawi zonse pamene mukukonza ndi kusunga chakudya ?
3. Ndi njira ziti zomwe mungalekanitsire zakudya zophika ndi zosaphika ngati mulibe zipangizo zokwanira?
4. Ndi mavuto ati omwe mungakumane nawo ngati mutafuna kuti mulimbikitse mchitidwe osaphatikiza zakudya zophika ndi zosaphika mmakomo mwanu?

Mayankho a mafunso otsogolera zokambirana

1. Kutsuka nyama kapena nyama za mgulu la mbalame mu sinki kukhoza kupangitsa kut tizilombo tamunyama tipite mu sinki ndi kufalikira ku zakudya kapena ziwiya zina zomwe zingatsukidwenso mu sinkimo.
2. Kusiyanitsa malo kapena chiwiya chosungira zakudya zophika ndi zosaphika kumateteza kuti tizilombo tomwe timakhala mu zakudya zosaphika tisafalikire mu zakudya zophika kale.
3. Ngati zipangizo za chivindikiriro palibe, khazikitsani malo ake ake okonzerapo chakudya chisanaphikidwe ndi enanso paokha okonzerapo chakudya chophika kale.
4. Mavutowa ndi monga; kusowa kwa ziwiya zokwanira, kusowa malo okwanira okonzerapo ndi kusungirapo zakudya kuti tisiyanitse zakudya zophika ndi zosaphika.

Zoyenera kuchita (Titani?)	Machitidwe ake (tichite motani?)
Pewani kuti tizilombo tamuchakudya china tisafike mu chakudya china ndi kuchiononganso.	• Gwiritsani ntchito ziwiya zosiyana monga mipeni ndi zodulilapo zakudya mukamakonza zakudya zosaphika. • Ngati zipangizo zokwanira mulibe, onetsetsani kuti mwatsuka ziwiya zogwiritsidwa ntchito kale monga mipeni, podulirapo kapena kukonzerapo chakudya ndi sopo komanso madzi aukhondo musanayambe kudula kapena kukonza chakudya china. • Ngati ziwiya za zivindikiliro mulibe, gwiritsani ntchito mapepala kapena masamba a chilengedwe monga masamba a nthochi kuti musiyanitse zakudya zophika ndi zosaphika. • Mu filiji sungani zakudya zaziwisi (zosaphika) monga nyama, nsomba, nyama ya nkhuku m'musi mwa zakudya zophika kuti tizilombo tamuchakudya chosaphikachi tisafike ndi kuononga chakudya chophika. • Osawaza madzi omwe munagwiritsa ntchito pofewetsa kapena kununkhilitsa nyama yayiwisi pa chakudya chophikaphika

Mafunso otsogolera zokambirana

1. Ndi mavuto ati amene angadze kamba kakuti tizilombo tamuchakudya china tafika mu chakudya china ndi kuchiononganso?
2. Kusiyanitsa ziwiya zogwiritsira ntchito pa zakudya zophika ndi zosaphika kumathandiza bwanji kuchepetsa kufala kwa tizilombo toopsa topezeka mu zakudya?
3. Kutsuka ziwiya monga mipeni, mbale ndi malo okonzera zakudya ndi sopo zimathandiza bwanji kuchepetsa kufala kwa tizilombo kuchoka mu zakudya zina kulowa mu zakudya zina pamene zipangizo zogwiritsa ntchito pokonzera chakudya zili zochepa?
4. Ndi njira ziti zomwe mungagwiritse ntchito kuti zakudya zophika ndi zosaphika zisungidwe malo osiyana ngati muli ndi ziwiya zochepa?

Mayankho a mafunso otsogolera zokambirana

1. Zikhoza kuyambitsa matenda odzera mu chakudya mmatupi a anthu.
2. Zimachepetsa kufala kwa tizilombo kuchoka mu chakudya chosaphika kupita ku chakudya chophika.
3. Kutsuka kumachotsa ndi kupha tizilombo mu ziwiya komwe kumapangitsa kuti tizilombo tomwe tinali mu zakudya zina tisalowe mu zakudya zina.
4. Ngati zipangizo monga mabeseni mulibe, gwilitsan ntchito mapepala kapena masamba anthochi posungira zakudya kuti zakudya zophika ndi zosaphika zikhale malo osiyana.

Ndondomeko zowonjezera

1. **Ndondomeko yonse yokonzera chakudya:** Tsindikani kuti zakudya zophika ndi zosaphika zisiyanitsidwe mu ndondomeko yonse yokonzera chakudya kuchokera panthawi yogula, yothira zokometsera mpaka yophika kuti tichepetse kufala kwa tizilombo towonononga zakudya.
2. **Chenjezo pofewetsa ndi kukometsera zakudya:** Kumbukirani kuti madzi ofewetsera kapena kukometsera zakudya asawazidwe pa zakudya zophika kale kuti tichepetse kufalitsa tizilombo towononga chakudya.
3. **Pewani kuyika zakudya zotentha mu chipepala cha pulasitiki:** Osaika zakudya zotentha kwambiri mu chipepala cha pulasitiki chifukwa chifundizi chimapangitsa kuti chipepala chizitulutsa poizoni (ziphe) zimene zikhoza kumatsikirira ku zakudya ndikuonongа chakudyacho.

Mafunso owonjezera otsogolera zokambirana:

1. Kupatula kusiyanitsa zakudya pa nthawi imene mukuphika, nchifukwa chiyani kusiyanitsa zakudya kuli kofunikira pa nthawi yogula komanso pofewetsa ndi kuyika zokometsera?
2. Kuika chakudya chotentha mu chipepala cha pulasitiki kumadzetsa chiopsezo chanji pamoyo wamunthu?
3. Nchifukwa chiyani zakudya zotentha sizikuyenera kusungidwa mmapepala a pulasitiki?

Mayankho a mafunso owonjezera otsogolera zokambirana

1. Kusiyanitsa zakudya zophika ndi zosaphika nthawi zonse kuyambira pogula komanso pothira zokometsera ndi zofewetsera kumathandiza kupewa kuonongeka kwa zakudya komanso matenda akudza kamba kakudya chakudya choonongeka.
2. Ma pepala a pulasitiki akatentha amatulutsa ziphe zomwe zimaononga zakudya ndi miyoyo.
3. Zakudya zotentha zisasungidwe mu pepala la pulasitiki chifukwa pepala limasungunuka ndi kumalowa muchakudya ndikuchiononga zomwe zimadzetsa chiopsezo pamoyo wamunthu amene angadye chakudyacho.

3 NGODYA 3: PHIKANI MOKWANIRA

Kufunika kwake: Kuphika mokwanira kukhoza kupha tizilombo tonse toopsya muchakudya. Kafukufuku anasonyeza kuti kuphika chakudya pakutentha kwa mlingo wa 70°C kukhoza kuthandiza kuti chakudyachi chikhale choti mkudyedwa opanda kupereka chiopsezo chilichonse. Chakudya chomwe tiyenera kuyikapo chidwi kwambiri ndimonga nyama yogaya, nyama yobulungiza, nyama younjiliza komaso nyama yamtundu wa mbalame monga nkhuku.

KEY 3: PHIKANI MOKWANIRA

Zoyenera kuchita (Titani?)	Machitidwe ake (tichite motani?)
Phikani chakudya mokwanira makamaka nyama, nsomba, mazira komanso nyama yamtundu wa mbalame monga nkhuku.	▪ Gwiritsani ntchito chipangizo choyezera katenthedwe (thermometer) ngati chilipo; chiyikeni pakatikati pomwe pali mnofu wambiri wanyama. ▪ Ngati chipangizo choyezera katenthedwe palibe; • Onetsetsani kuti nyama yamtundu wambalame monga nkhuku, izikha madzi oyera ndipo siyikuoneka yofiyilira koma yoyera. • Onetsetsani kuti mazila ndi nsomba zaphikidwa mokwanira ndipo zikutentha paliponse. • Onetsetsani kuti zakudya za madzimadzi monga msuzi ndi ndiwo zobwatitsa zawilitsidwa kwa mphindi zopitilira imodzi. • Onetsetsani kuti nthuli zazikulu zanyama zaphikidwa mokwanila ndipo mutha kuchekako kuti muone mkati ngati zapsya ndithu.

Mafunso otsogolera zokambirana

1. Ndi chifukwa chiyani kuli koyenera kuphika nyama, nyama yamtundu wambalame monga nkhuku, mazira ndi nsomba ku mlingo wosachepera 70°C?
2. Ndizizindikiro ziti zomwe zimasonyeza kuti nyama yamtundu wa mbalame monga nkhuku komanso nthuli zikuluzikulu za nyama zaphikidwa mokwanira opanda kugwilitsa ntchito chipangizo choyesela katenthedwe?
3. Ndi chifukwa chani kuli kofunika kubwatitsa zakudya zamadzimadzi monga msuzi ndi ndiwo zobwatitsa kwamphindi zosachepera imodzi?

Mayankho a mafunso otsogolera zokambirana

1. kuphika zakudya pa mlingo wosachepera 70°C kumapha tizilombo tambiri toyambitsa matenda monga ma bakiterira, ma vayirasi ndi maparazayiti.
2. Ngati kachipangizo koyezera katenthedwe ka zakudya palibe, onetsetsani kuti nyama yamtundu wambalame monga nkhuku, izikha madzi oyera ndipo siyikuoneka yofilira koma yoyera. Onetsetsani kuti nthuli zikuluzikulu za nyama zapsa moyenera podula kanthuli kuchokera pakati panthuli yayikulu kuti mutsimikize ngati yapsadi.
3. Kubwatitsa zakudya zamadzimadzi monga msuzi ndi ndiwo kwamphindi zosachepera imodzi nkofunika kuti tizilombo tife.

Gwiritsani ntchito chipangizo chotenthetsera zakudya(microwave) moyenera

Zoyenera kuchita (Titani?)	Machitidwe ake (tichite motani?)
Gwiritsani ntchito chipangizo chotenthetsera chakudya (microwave) moyenera.	■ Onetsetsani kuti chakudya chatenthetsedwa mokwanira mbali zonse mu chipangizo chotenthetsera chakudya (microwave) ■ Pewani kugwiritsa ntchito mbale zosayenera mu chipangizo chotenthetsera chakudya (microwave)

Mafunso otsogolera zokambirana

1. Nchifukwa chiyani sitikuyenera kugwiritsa ntchito mbale zosayenera mu chipangizo chotenthetsera chakudya(microwave)?

Mayankho a mafunso otsogolera zokambirana

1. Ziwiya zina zimatha kusungunuka kapena kutulutsa mankhwala owopsa (ziphe), zina zosayenera zimalepheretsa kugawidwa bwino kwa kutentha zomwe zikhoza kupangitsa kuti tizilombo toopsa tisafe.

Yezani mlingo wakatenthedwe ka zakudya pamene mukuphika

Zoyenera kuchita (Titani?)	Machitidwe ake (tichite motani?)
Onani mlingo wakatenthedwe kachakudya pamene mukuphika	▪ Ikani kachipangizo koyezera katenthedwe (thermometer) pakatikati pachakudya ndipo onetsetsani kuti sikanagunde fupa kapena chiwiya. ▪ Ngati kachipangizo koyezera katenthedwe (thermometer) palibe: • Onetsetsani kuti nyama yamtundu wambalame monga nkhuku, izikha madzi oyera ndipo siyikuoneka yofiyilira koma yoyera. • Onetsetsani kuti zakudya za madzimadzi monga msuzi ndi ndiwo zawilitsidwa kwa mphindi zopitilira imodzi. • Onetsetsani kuti mazila ndi nsomba zaphikidwa mokwanira ndipo zikutentha paliponse.

Mafunso otsogolera zokambirana

1. Kodi ndi njira iti yoyenera yogwiritsira ntchito kachipangizo koyezera katenthedwe pofuna kuona mlingo wakutentha kwa chakudya pophika?
2. Ndi chifukwa chiyani kuli kofunika kuonetsetsa kuti kachipangizo koyezera katenthedwe kasagunde fupa kapena chiwiya?

Mayankho a mafunso otsogolera zokambirana

1. Ikani kachipangizo koyezera katenthedwe (thermometer) pakatikati pachakudya ndipo onetsetsani kuti sikanagunde fupa kapena chiwiya, izi zimathandiza kuti kachipangizoka kabweletse mlingo oyenera wakatenthedwe.
2. Kukhudza fupa kapena chiwiya kumapereka zotsatira zolakwika chifukwa katenthedwe ka malo amenewa sikafanana ndikutentha kwa chakudya cheni chenicho.

Tenthetsani zakudya zophika zimene munasunga

Zoyenera kuchita (Titani?)	Machitidwe ake (tichite motani?)
Tenthetsani chakudya chophikidwa kale moyenera	▪ Ngati palibe kachipangizo koyezera katenthedwe (thermometer), gwiritsani ntchito zizindikiro zowoneka ndi maso kuti chakudya chakolera moto mbali zonse. ▪ Tenthetsani chakudya chamadzimadzi pochibwatitsanso. Chakudya cholimba monga nyama, chitakaseni olo chekani kuti muonetsetse kuti moto ukulowerera mbali zonse.

Mafunso otsogolera zokambirana

1. Ndi chifukwa chiyani kutenthetsa chakudya mokwanira kuli kofunika, makamaka kuchakudya choti chinasungidwa?
2. Kodi ndizizindikiro ziti zomwe tingawonere kuti chakudya chomwe chatenthetsedwa chakolera moto mbali zonse?

Mayankho a mafunso otsogolera zokambirana

1. Kutenthetsa chakudya mokwanira ndikofunika kuti tiphe tizilombo tomwe tingakhale kuti taswana nthawi yomwe chakudya chimasungidwa.
2. Zizindikiro zomwe tingawonere kuti chakudya monga nyama chatentha mokwanira ndi izi; kubwata kwa madzi otenthetsera chakudya, kucheka nyama kuti muonetsetse kuti moto walowerera mbali zonse.

4 NGODYA 4: SUNGANI CHAKUDYA MOSAMALIKA

Kufunika kwake: Tizirombo tikhoza kuchulukana mwansanga ngati tisunga chakudya chathu malo ofunda kapena malo achinyontho. Njira zosamalira chakudya, zimalunjika poumitsa komanso kuchepetsa kapena kukweza kutentha kuti zichepetse kapena kuyimitsa kuswana kwa tizirombo toopsa tosawoneka ndimaso. Kuumitsa chakudya podzera munjira ya kuyanika, kuyika mchere komaso kupunthika ndizofunika kwambiri poteteza kuswana kwatizirombo.

A

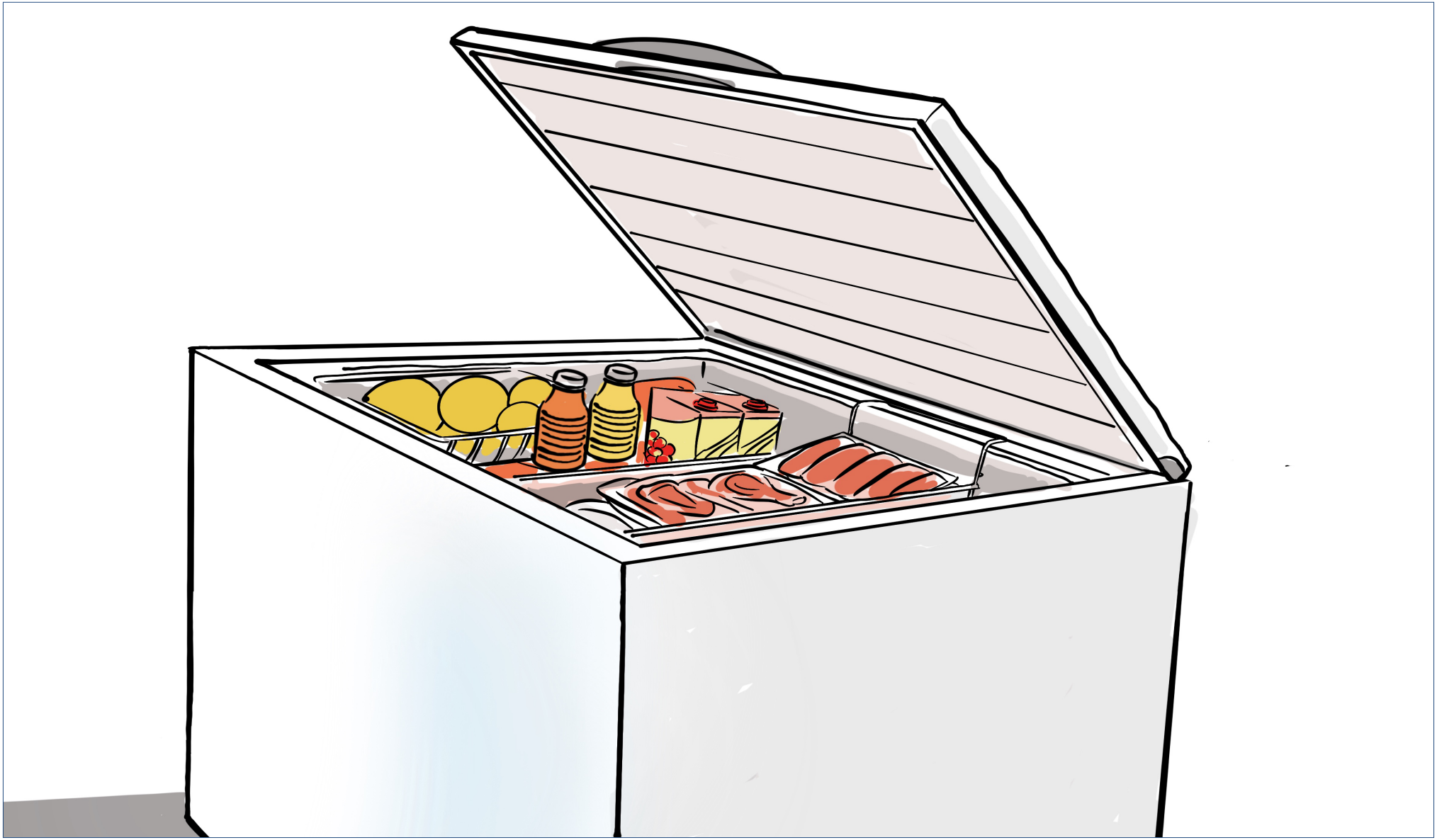
KUZIZILITSA

KUZIZILITSA

Zoyenera kuchita (Titani?)	Machitidwe ake (tichite motani?)
Zizilitsani mwachangu chakudya chophika kapena chosachedwa kuonongeka pa mlingo wosapitilira 5°C.	Sungani moziziritsira (fridge) zakudya zonse zosachedwa kuonongeka mwachangu mukaphika kapena mukagula ndipo onetsetsani kuti mukumakaona ngati moziziritsira (fridge) yanu ili pamlingo osaposera 5°C pafupipafupi pogwiritsa ntchito kachipangizo koyezera katenthedwe.
Musasunge chakudya kwanthawi yayitali, ngakhale chili mozizilitsira (fridge). Chakudya chophika chisasungidwe koposera masiku atatu.	Lembani masiku pa chiwiya chomwe mwasungira chakudya moziziritsira (fridge) ndipo tcherani chikumbutso kuti chidzagwiritsidwe ntchito kapena kutayidwa pakatha masiku atatu.

B

KUSUNGUNULA CHAKUDYA CHOMWE CHINAWUMITSIDWA M'MALO OZIZIRITSIRA MOWUMITSA(FREEZER)



KUSUNGUNULA CHAKUDYA CHOMWE CHINAWUMITSIDWA M'MALO OZIZIRITSIRA MOWUMITSA (FREEZER)

Zoyenera kuchita (Titani?)	Machitidwe ake (tichite motani?)
Musayike pa mtunda chakudya chomwe munawumitsa moziziritsa kuti chisungunuke. Tulutsani chakudya m'malo oziziritsa mowumitsa (freezer) ndikuyika m'malo oziziritsa chabe (fridge) kuti chisungunuke	Khalani ndi nthawi yokwanila kuti chakudya chisungunuke bwino lomwe mu chipangizo choziziritsa (fridge). Mwanjira ina, gwiritsani ntchito madzi ozizira kapena chipangizo chotenthetsera chakudya (microwave) pofuna kusungunula chakudya mwansanga komanso mosamala. Chakudya chosungunulilidwa mu muchipangizo chotenthetsera chakudya chiphikidwe nsanga.

Mafunso otsogolera zokambirana

1. Ndi chifukwa chiyani sichinthu chabwino kusungunulira chakudya pamtunda?
2. Kodi kukonzekera bwino kumathandiza bwanji kuti chakudya chisungunulidwe moyenera mu chipangizo choziziritsa (fridge)?
3. Kodi njira yogwiritsa ntchito chipangizo chotenthetsera chakudya (microwave) posungunula chakudya choziziritsidwa mowumitsa imasiyana bwanji ndi njira zina?

Mayankho a mafunso otsogolera zokambirana

1. Kusungunulira chakudya pamtunda kumalimbikitsa kuswana kwa tizilombo zomwe zimalimbikitsa kubuka kwa matenda akudza kamba kakudya chakudya choonongeka.
2. Kukonzekera kusungunula chakudya chomwe munaumitsa mu chipangizo choziziritsa (fridge) kumathandiza kupereka mpata okwanira kuti chakudya chisungunuke bwino pa mlingo wakatenthedwe koyenera komanso kosasinthasintha komwe kamalepheretsa kuti tizilombo tiswane.
3. Chipangizo chotenthetsera chakudya (microwave) chimathandiza kuti chakudya chisungunuke msanga poyerekeza ndi chipangizo choziziritsa (fridge) koma chakudya chimayenera kuphikidwa mwansanga kuopetsa kuti tizilombo tingaswane mmagawo omwe ali otentha .

Pezani zakudya zatsopano (fresh) tsiku lirilonse

Zoyenera kuchita (Titani?)	Machitidwe ake (tichite motani?)
Pezani chakudya cha chiwisi ndikuphika kapena kukonza chokhacho chokwanila patsikulo.	Gulani zakudya zaziwisi zongokwanira, pangani dongosolo lazakudya mosamala ndipo phikani chakudya chongokwanira kudya munthawiyo. Osasiya mikute ngati mulibe malo osungira ozizilitsa monga chipangizo choziziritsa (fridge).

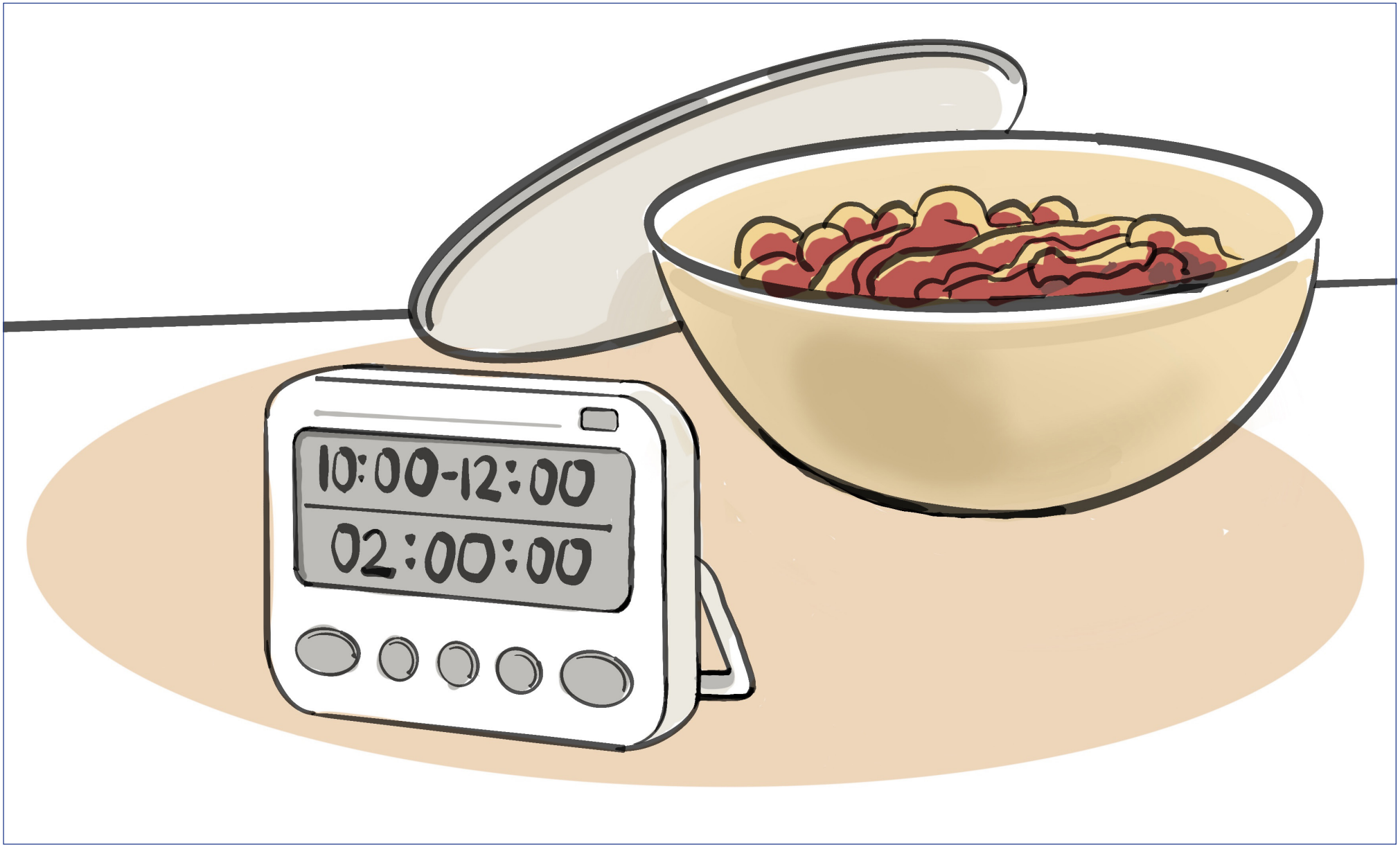
Mafunso otsogolera zokambirana

1. Kodi ndi njira ziti zomwe zingatsatidwe pofuna kuonetsetsa kuti chakudya chokhacho cha mlingo okhawo omwe ukufunika panthawiyo ndicho chaphikidwa?
2. Kodi kuopsa kosunga chakudya chotsala pomwe tilibe mosungira mozizilitsa monga chipangizo choziziritsa (fridge) ndikotani?

Mayankho a mafunso otsogolera zokambirana

1. Pokhala ndi dongosolo lodziwira mtundu ndi kuchuluka kwa chakudya choti muphike chokwanira anthu omwe adye chakudyacho kuti chakudya chisatsale chosadyedwa.
2. Chakudya chikhoza kuonongeka ndi tizilombo toyambitsa matenda pa nthawi yomwe tikusunga.

C KASUNGIDWE KACHAKUDYA CHOPHIKA



KASUNGIDWE KACHAKUDYA CHOPHIKA

Zoyenera kuchita (Titani?)	Machitidwe ake (tichite motani?)
Musasiye chakudya chophika chosavindikira kwa nthawi yayitali (Idyani chakudya chophika pasanathe maola awiri)	Tcherani nthawi kuti mudziwe nthawi yomwe chakudya chakhalira kuchokera nthawi yomwe chaphikidwa kufikira nthawi yomwe mukufuna mudye. Vindikilirani chakudya chikatsala ndipo ikani mu chipangizo choziziritsa (fridge) mofulumira

Mafunso otsogolera zokambirana

1. Ndi chifukwa chiyani ndikosayenera kusunga chakudya chophika chosavindikira kupitilira maola awiri?
2. Ubwino ovindikilira chakudya chikatsala ndiotani? Nanga ndi zovindikilira ziti zomwe zili za bwino?
3. Ndi ndondomeko ziti zomwe ziyenera kutsatidwa pofuna kuziziritsa chakudya mu chipangizo choziziritsa (fridge) moyenera chikatsala?

Mayankho a mafunso otsogolera zokambirana

1. Chakudya chophikaphika chakuti chayikidwa pa mtunda chosavindikiridwa kwa maola odutsa awiri chili ndi kuthekera kwakuti tizilombo toononga chakudya tiswane kwambiri mu chakudyamo
2. Kuvindikira chakudya kumateteza kuti tizilombo toyambitsa matenda tisatele pa chakudya. Zipangizo zabwino zovindikirira ndi monga timasefa ndi kansalu koyera komwe kamalora kuti mpweya uzidutsa tikavindikira ngati kuli koyenera.
3. Vindikilirani chakudya chikatsala pompopompo, ngati ndichotentha ziziritsani ndikuchiyika mu ziwiya zakutimuvindikire musadachisunge mu chipangizo choziziritsa (fridge).

D KUSUNGA CHAKUDYA PAMTUNDA

KUSUNGA CHAKUDYA PAMTUNDA

Zoyenera kuchita (Titani?)	Machitidwe ake (tichite motani?)
Umitsani kapena chepetsani madzi mu zakudya monga zamasamba, zipatso ndi nyama	Gwiritsani ntchito thandala, makina owumitsira zakudya ogwiritsa ntchito mphamvu ya magetsi kapena yanikani chakudyacho padzuwa koma chisakhudze pansi. Onetsetsani kuti chakudya chauma bwino ndipo chasungidwa mu ziwiya zosalowetsa mpweya kuti tipewe chinyontho kulowamonso.

Mafunso otsogolera zokambirana

1. Kodi kuwumitsa chakudya powumitsa pa dzuwa kapena poyika mchere wambiri ku chakudya zimathandiza bwanji kuchepetsa kuswana kwa tizilombo toononga chakudya?
2. Kodi ndi njira ziti zomwe zingagwiritsidwe ntchito powumitsa chakudya? Ubwino wa njira zimenezi ndi otani?
3. Kodi ziwiya zosungira chakudya zosalowetsa mpweya zimathandiza motani popewa kuti chinyontho chisalowenso mu chakudya?

Mayankho a mafunso otsogolera zokambirana

1. Kuwumitsa chakudya kumachepetsa chinyontho mu chakudya zomwe zimachepetsa kuswana kwa tizilombo ndi chuku zomwe zingaononge chakudya.
2. Chakudya chikhoza kuwumitsidwa pogwiritsa ntchito thandala, makina owumitsira zakudya ogwiritsa ntchito mphamvu ya magetsi kapena kuyanika chakudyacho padzuwa koma chisakhudze pansi. Kugwilitsa ntchito chipangizo chowumitsa zakudya chogwilitsa ntchito mphamvu ya dzuwa ndi chotsika mtengo komanso chaukhondo, zipangizo zowumitsira zogwilitsa ntchito magetsi zimawumitsa bwino ngakhale nyengo yamvula kapena mitambo, njira yotsika mtengo kwambiri ndiyowumitsa pa dzuwa ku malo omwe dzuwa limawala bwino.
3. Ziwiya zachivindikiriro chabwino zimathandiza kuti chinyontho chomwe chingapangitse chakudya kuonongeka msanga chisalowenso mu chakudya zomwe zimathandiza kuti chakudya chisaonongeke komanso kukhala nthawi yayitali.

E KUSUNGA CHAKUDYA POYIKAKO MCHERE WAMBIRI

KUSUNGA CHAKUDYA POYIKAKO MCHERE WAMBIRI

Zoyenera kuchita (Titani?)	Machitidwe ake (tichite motani?)
Ikani nyama, nsomba kapena masamba mu mchere kuti muchepetse chinyontho muchakudya ndikuchepetsa kuswana kwatizilombo toononga.	Pakani mchere chakudya kapena chivikeni m'madzi amchere. Sungani chakudyacho pamalo ozizira komaso owuma bwino kuti njirayi igwire ntchito moyenera. **Chenjezo**: Njirayi siyoyenera kugwilitsa ntchito kwa anthu odwala matenda othamanga magazi chifukwa mchere umayika anthuwa pachiopsezo.

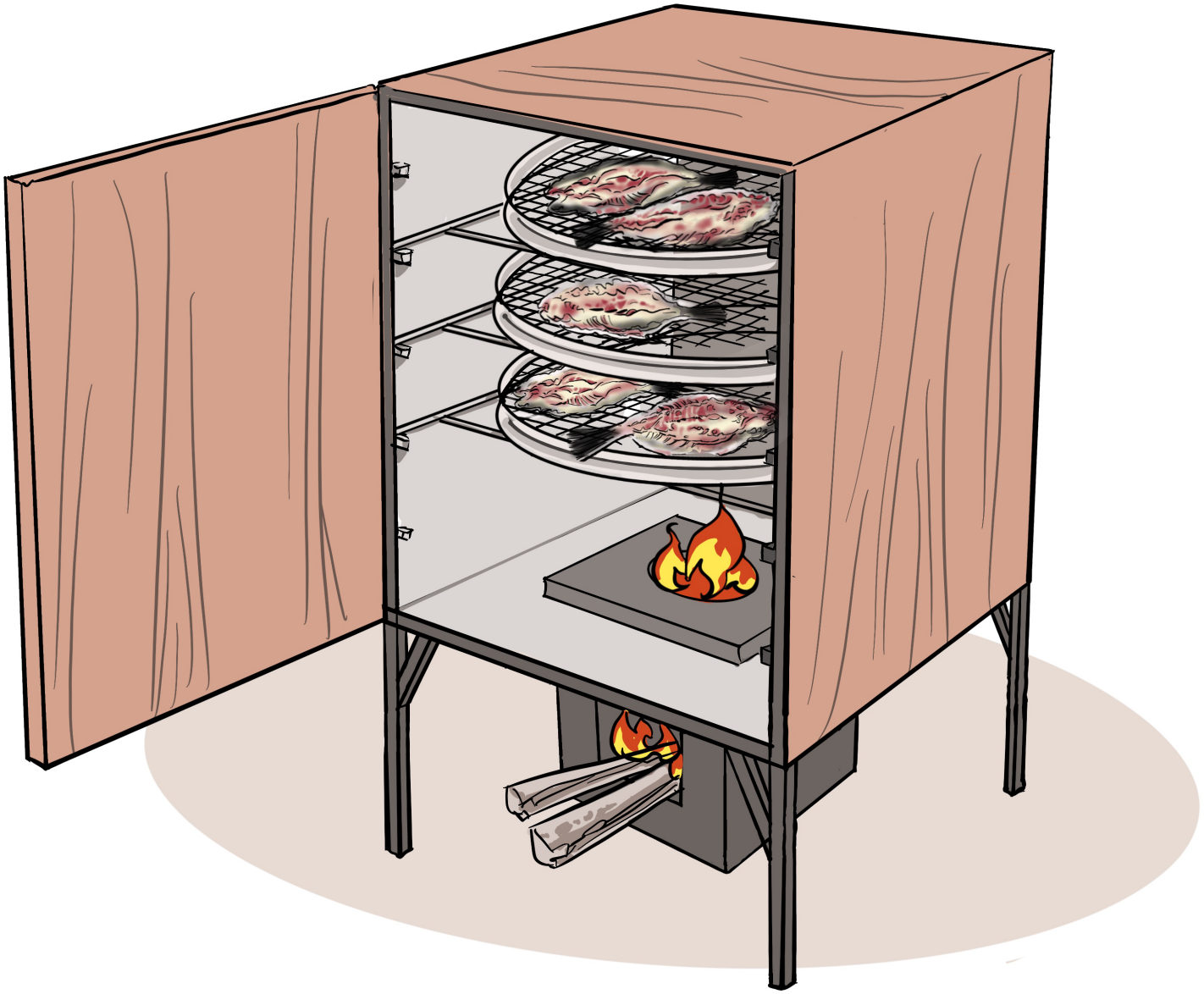
Mafunso otsogolera zokambirana

1. Kodi kuyika mchere wambiri mu chakudya kumathandizira bwanji kuchepetsa kuswana kwa tizirombo towononga chakudya?
2. Ndi maluso ati omwe tingatsate kuti tithire mchere moyenera pachakudya kuti chiume?
3. Ndi chifukwa chiyani zili zofunika kusunga chakudya chomwe chaumitsidwa popaka mchere pamalo ozizila komanso ouma bwino?

Mayankho a mafunso otsogolera zokambirana

1. Mchere umachepetsa chinyontho muchakudya zomwe zimapangitsa kuti tizilombo tisaswane ndi kuononga chakudya.
2. Yikani mchere moyenera muchakudya popaka bwinobwino mbali zonse za chakudya kapena kuviika chakudya m'madzi amchere, izi zimathandiza kuti chakudya chonse chikhale ndi mchere.
3. M'malo ozizira komanso ouma bwino tizilombo toononga chakudya sitiswana choncho chakudya chimakhala nthawi yayitali osaonongeka.

F KUFUKIZA CHAKUDYA NDI UTSI



KUFUKIZA CHAKUDYA NDI UTSI

Zoyenera kuchita (Titani?)	Machitidwe ake (tichite motani?)
Fukizani ndi utsi nyama ndi nsomba kuti zisamalike	Fukizani chakudya ndi utsi wa nkhuni kapena makala osati ndi moto oyaka. Onetsetsani kuti chakudyacho chayikidwa mchere musadachifukize ndi utsi. Sungani chakudya pamalo ozizira komanso owuma bwino.

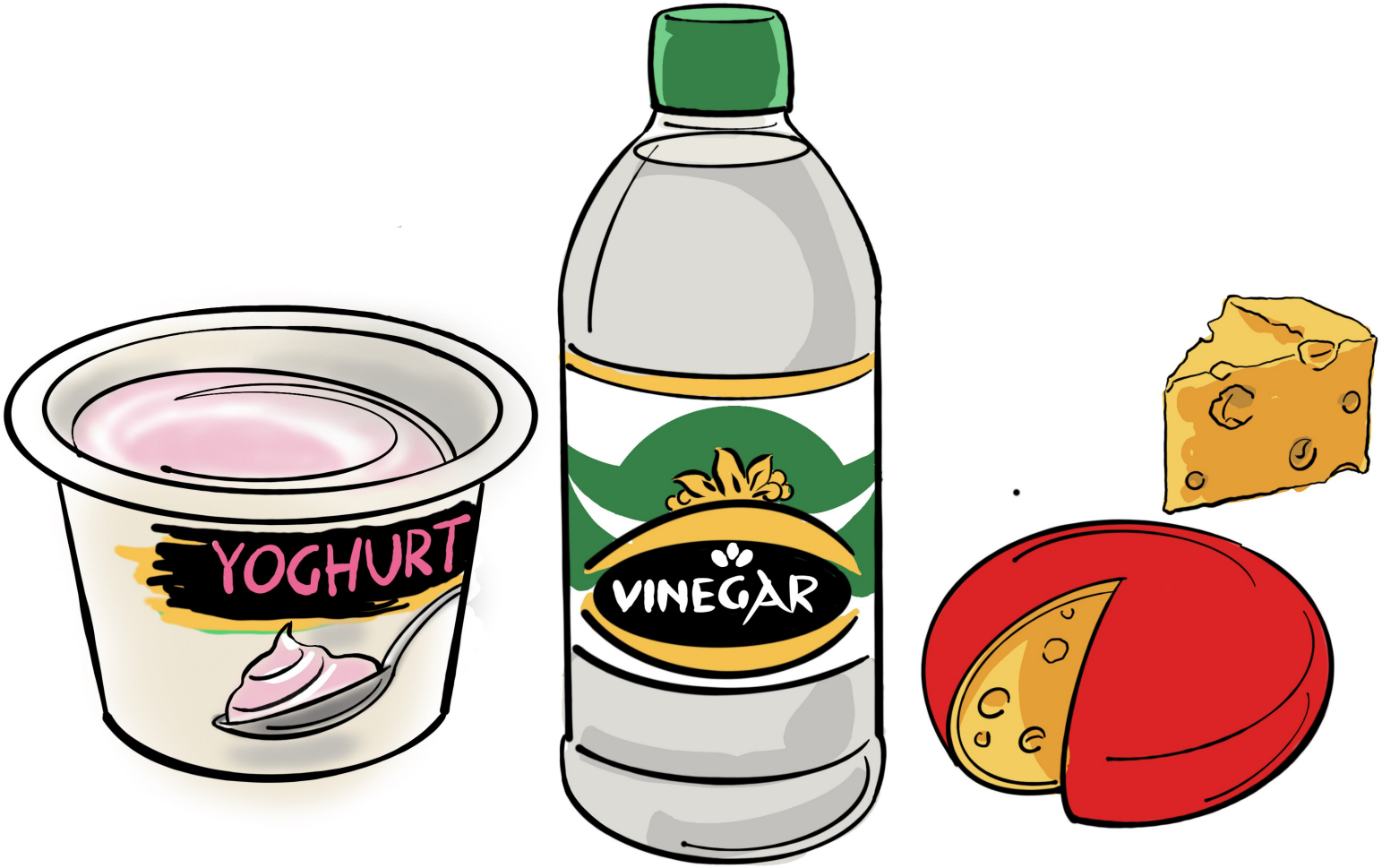
Mafunso otsogolera zokambirana

1. Kodi kufukiza chakudya ndi utsi kumathandizira bwanji kupha tizirombo towononga chakudya? Nanga ndi chifukwa chiyani kuli kofunika kuika chakudya mumchere musanachifukize ndi utsi?
2. Ndindondomeko zanji zomwe ziyenera kutsatilidwa pofuna kuonetsetsa kuti nyama ndi nsomba zafukizidwa ndi utsi moyenera?

Mayankho a mafunso otsogolera zokambirana

1. Mu utsi muli zinthu zomwe zimachepetsa kuswana kwa tizilombo komanso mchere ndi kufukiza kumachepetsa chinyontho mu chakudya zomwe zimapangitsa kuti tizilombo tisaswane.
2. Fukizani chakudya ndi utsi wa nkhuni kapena makala osati ndi moto oyaka. Onetsetsani kuti chakudyacho chayikidwa mchere musadachifukize ndi utsi kuti chisungike komanso kuonjezera kakomedwe. Sungani chakudya pamalo ozizira komaso owuma bwino mukamaliza kufukiza.

G KUPUNTHIKA (FERMENTATION)



KUPUNTHIKA (FERMENTATION)

Zoyenera kuchita (Titani?)	Machitidwe ake (tichite motani?)
Punthikani zakudya monga masamba ndi zopangidwa kuchoka kumkaka monga yogati	Gwiritsani ntchito tizirombo toyenera tothandizira kuti chakudya chipunthikike bwino. Tsatirani ndondomeko yodziwika bwino kuti mugwiritse ntchito mlingo wazinthu oyenera ogwirizana ndi malo osungiramo pamene mukupunthika chakudya.

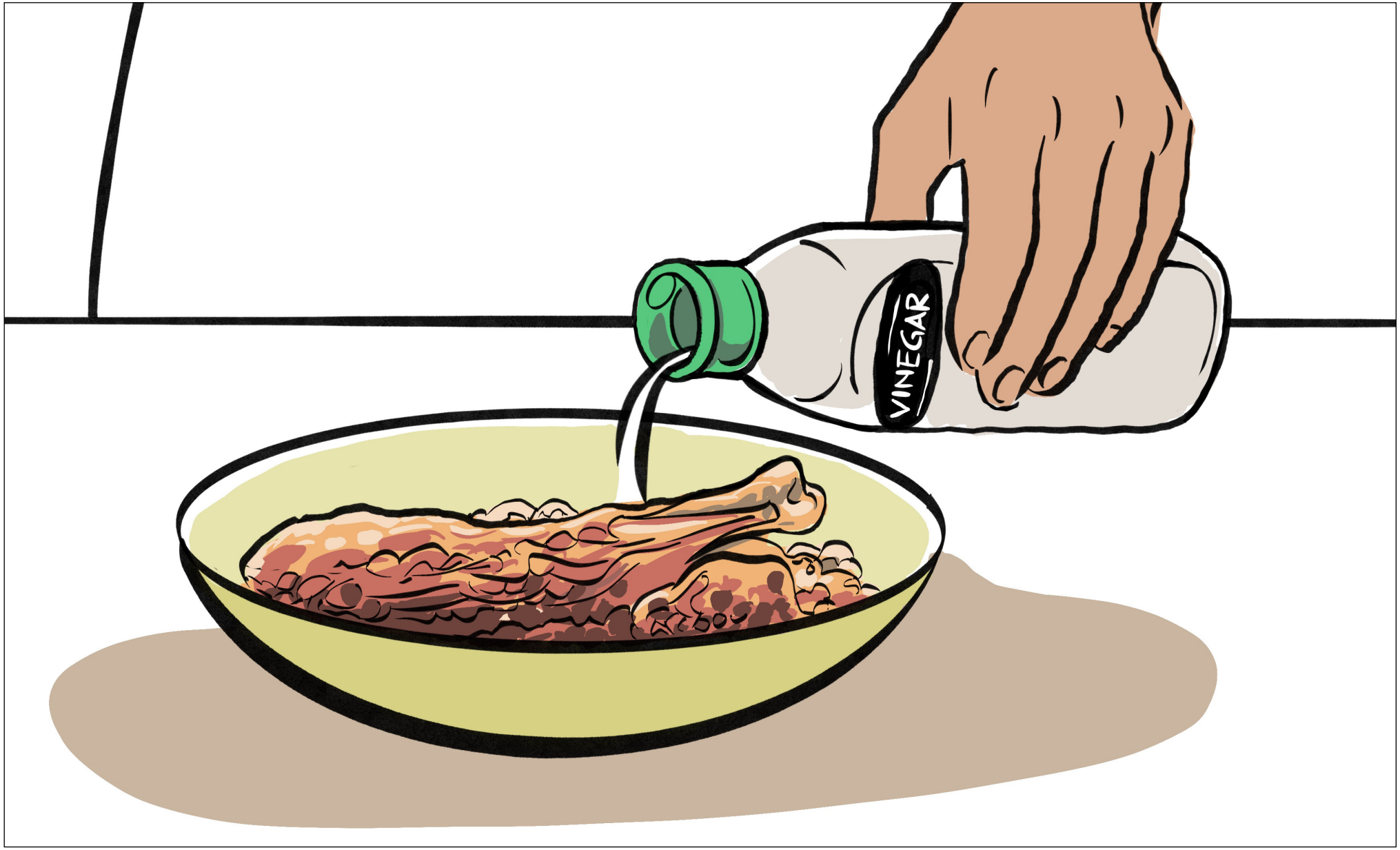
Mafunso otsogolera zokambirana

1. Ndi chifukwa chiyani kuli kofunika kutsatira ndondomeko zomwe zinayesedwapo kale pofuna kupunthika chakudya?
2. Ndimavuto ati omwe angakhalepo pomwe tikupunthika chakudya nanga mavutowa tingathane nawo bwanji?

Mayankho a mafunso otsogolera zokambirana

1. Kugwiritsa ntchito ndondomeko zakapunthikidwe ka zakudya zomwe zidayesedwapo kale kumathandiza kuti mugwiritse ntchito mlingo wazinthu oyenera ogwirizana ndi malo osungiramo izi zimachepetsa chiopsezo cha kuonongeka kwa chakudya komanso chakudya chimapunthika bwino.
2. Mavuto monga kuchepa kwa zipangizo zopunthikira, kusowa kwa tizilombo toyenera topunthikira kumasokoneza ndondomeko yopunthika zakudya. Mavutowa angathe ngati titagwiritsa ntchito ziwiya zotsuka bwino, tizilombo toyenera topunthikira komanso kuonetsetsa kuti malo omwe tikupunthikira chakudya akutentha moyenera komanso ndi mwaukhondo. .

H KUFEWETSA NDI KUKOMETSERA CHAKUDYA



KUFEWETSA NDI KUKOMETSERA CHAKUDYA

Zoyenera kuchita (Titani?)	Machitidwe ake (tichite motani?)
Viikani chakudya chanu mu zinthu zofewetsa kapena kukometsa chakudya monga viniga.	Konzani zinthu zanu zofewetsera ndi kukometsera chakudya pogwiritsa ntchito viniga kapena madzi a mandimu ndikunyika chakudyacho kwa kanthawi. Onetsetsani kuti chakudya ndichovindikira ndipo ngati kuli kotheka ikani mu chipangizo choziziritsa (fridge) panthawi yomwe mwachiviika mu zofewetsera ndi zokometserazi.

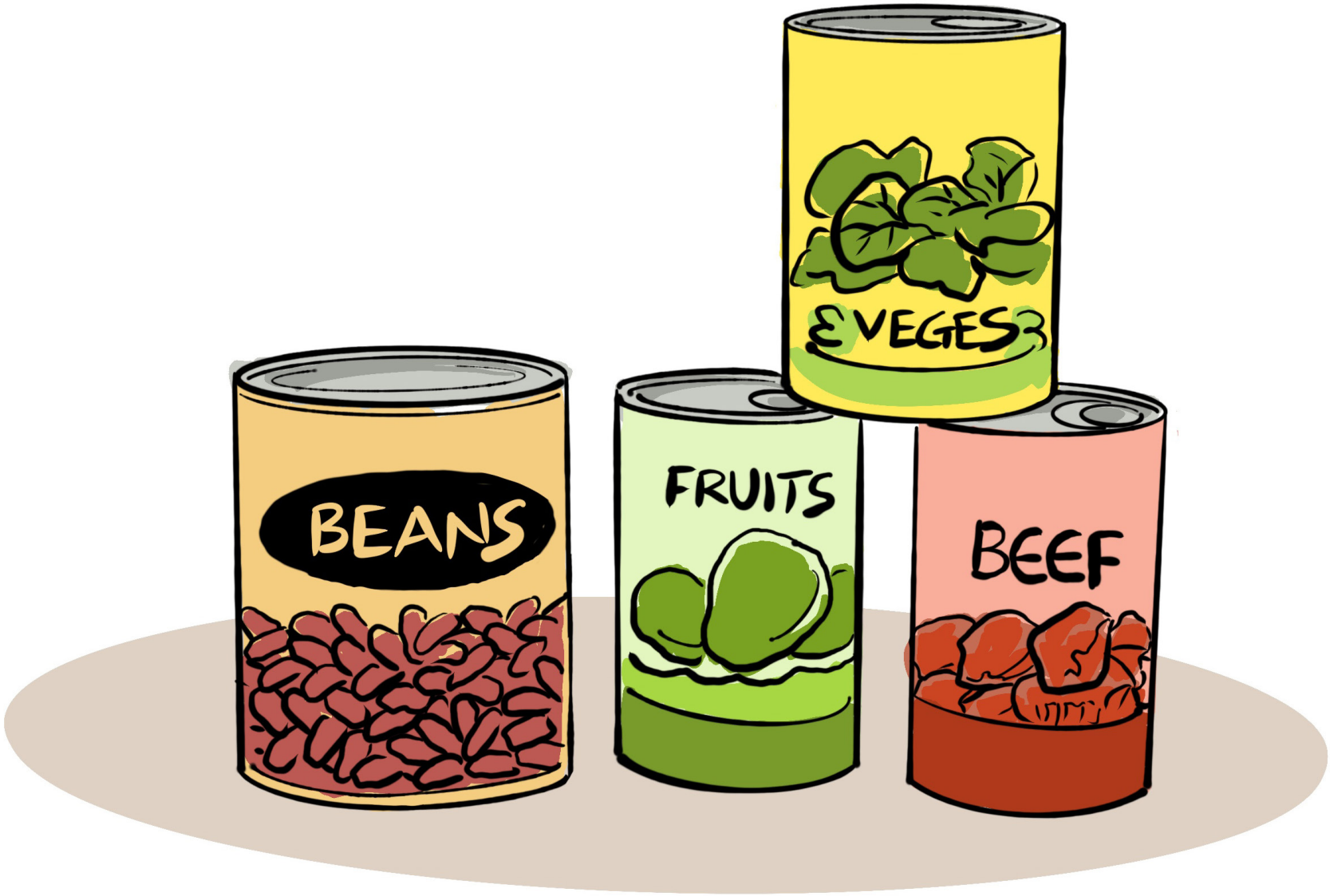
Mafunso otsogolera zokambirana

1. Pali ubwino wanji oviika chakudya mu zofewetsera ndi kukometsera? Nanga izi zimathandiza bwanji kuti chakudya chisungike bwino?

Mayankho a mafunso otsogolera zokambirana

1. Asidi wa mu zofewetsera kapena zokometsera zakudya amathandiza kuti tizilombo toononga zakudya tisaswane mu zakudya. Kuonjezera apo, asidi amapangitsa kuti chakudya chinunkhire komanso chikome kwambiri.

I KUSUNGA CHAKUDYA MU CHITINI



KUSUNGA CHAKUDYA MU CHITINI

Zoyenera kuchita (Titani?)	Machitidwe ake (tichite motani?)
Ikani chakudya mu zitini	Bwatitsani zitini kuti muphe tizilombo musanayikemo chakudya. Onetsetsani kuti chitini chatsekedwa moyenera kuti mpweya usamalowe ndi kutuluka. Sungani chakudya chamchitinichi molingana ndi mtundu wake (chosungika pa mtunda kapena chofunika mozizilitsira mongachipangizo choziziritsa (fridge))

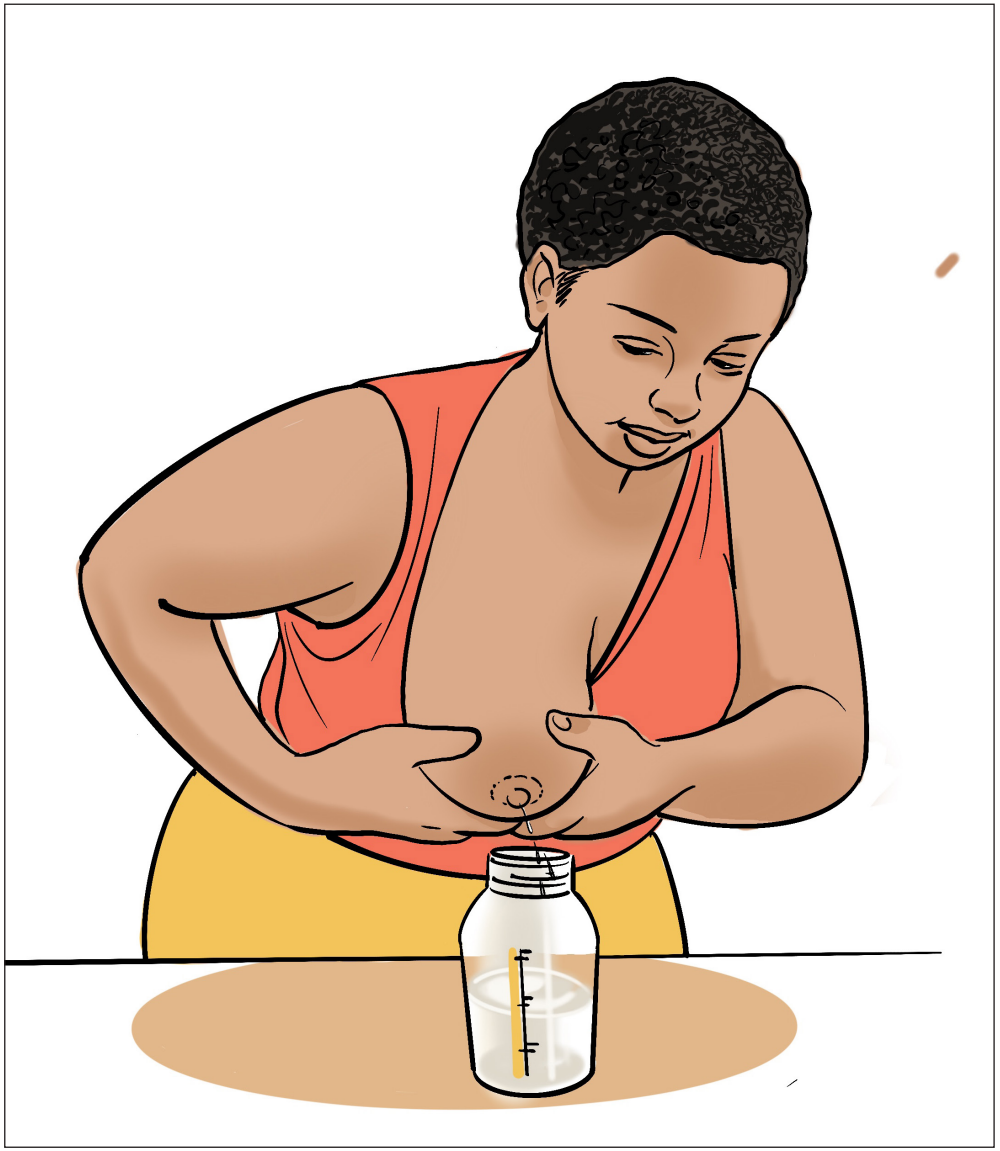
Mafunso otsogolera zokambirana

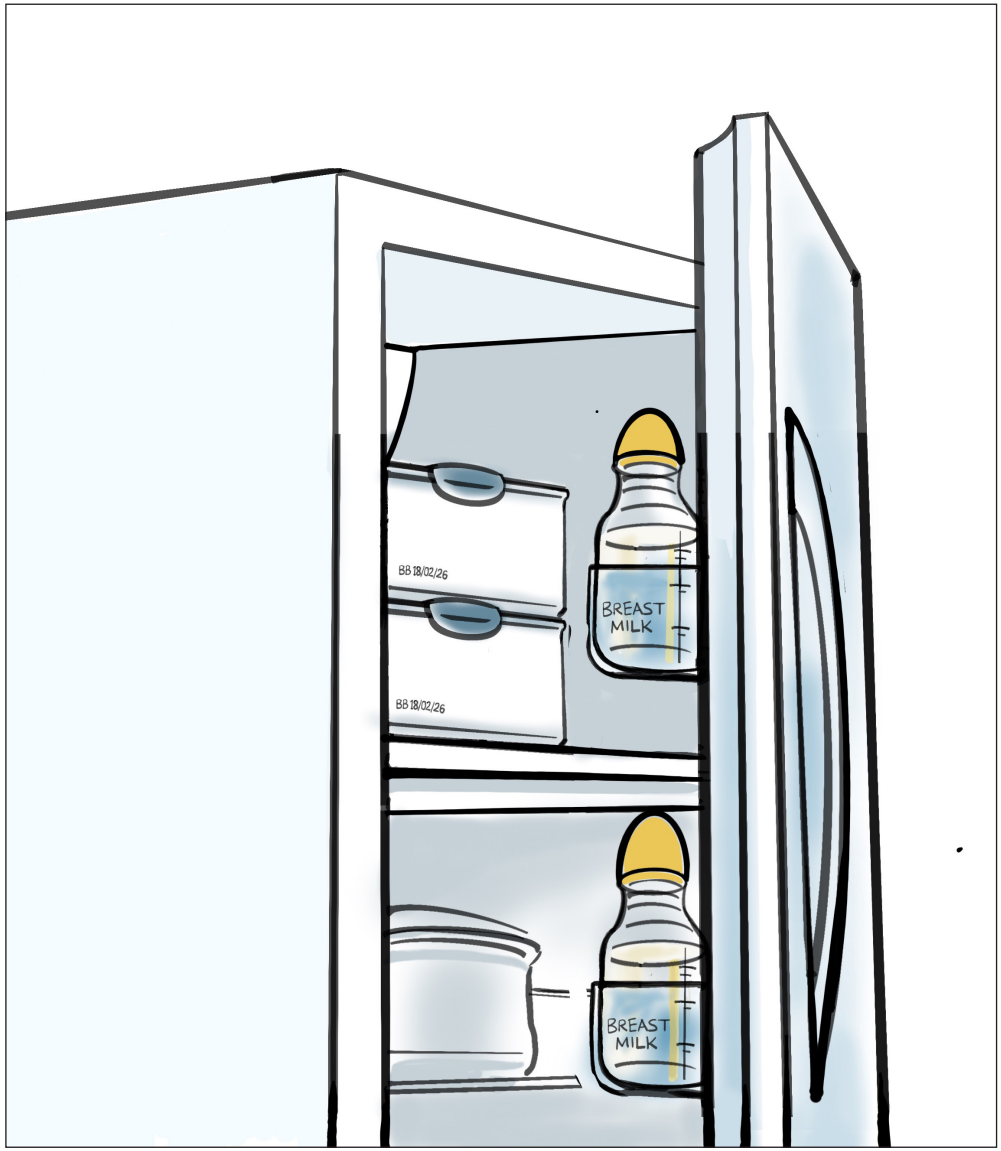
1. Kodi ndi zinthu ziti zoyenera kuchita pofuna kupewa kuswana kwa tizilombo ndi kuonongeka kwa chakudya chamuzitini?
2. Kodi kubwatitsa zitini tisanayikemo chakudya kumathandizira bwanji kuti chakudyacho chikhale chosamalika?
3. Ndiziwopsezo zanji zomwe zingakhalepo ngati sitinatseke ndikusunga bwino zitini za zakudya?

Mayankho a mafunso otsogolera zokambirana

1. Zinthu zofunikira kwambiri kuchita tikamasunga chakudya mu chitini ndi monga kubwatitsa zitini kuti muphe tizilombo musanayikemo chakudya, kutseka zitini moyenera kuti mpweya usamalowe ndi kutuluka ndi kusunga chakudya chamchitinichi molingana ndi mtundu wake (chosungika pa mtunda kapena chofunika mozizilitsira monga chipangizo choziziritsa (fridge))
2. Kubwatitsa zitini kumapha tizilombo tomwe tingaononge chakudya zomwe zimapangitsa kui chakudya chisaonongeke pamene mukusunga.
3. Kusatseka bwino zitini kapena mabotolo osungiramo zakudya kumapangitsa kuti mpweya ndi chinyontho zilowe mu chitini zomwe zingathandizire kuti tizilombo tiswane ndikuononga chakudya.

J NJIRA ZOYENERA POSUNGA MKAKA WAMMAWERE





NJIRA ZOYENERA POSUNGA MKAKA WAMMAWERE

Zoyenera kuchita (Titani?)	Machitidwe ake (tichite motani?)
Sungani mkaka wam'mawere mu chipangizo choziziritsa (fridge) kwamasiku osapitilira anayi, komanso kwamiyezi isanu ndi umodzi mu chipangizo choziziritsa mowumitsa (freezer).	• Gwiritsani ntchito chiwiya cha galasi kapena pulasitiki chokhala ndi chivindikilo posungira mkaka wammawere. • Tsukani chiwiya ndimadzi otentha asopo ndipo tsukuluzani mosamala ndi madzi oyera otentha. • Ngati mwasunga mkakawo mu ziwiya zingapo, onetsetsani kuti chiwiya chilichonse chalembedwa tsiku lomwe mkakawo wayikidwamo ndipo mudzayambe kugwilitsa ntchito mkaka omwe munayika koyambilira. • Mkaka omwe waumitsidwa moziziritsa, usungununululidwe pang'onopang'ono mu chipangizo choziziritsa (fridge) ndipo ugwiritsidwe ntchito pasanathe tsiku limodzi. • Mkakawu ukhozanso kusungununililidwa poyika chiwiya mu jagi yomwe muli madzi ofunda ndipo ugwiritsidwe nthito pasanathe ola limodzi
Sungani mkaka wammawere mu ziwiya zotsuka komanso zosalowa mpweya pa mtunda kwa maola osapitilira anayi.	• Gwiritsani ntchito ziwiya zoyenera za galasi kapena za pulasitiki zokhala ndi chivindikiliro kufinyiramo mkaka wammawere. • Tsukani ziwiya ndi madzi asopo otentha ndipo tsukuluzani ndi madzi oyera otentha.

Mafunso otsogolera zokambirana

1. Ndi chifukwa chiyani zili zofunika kulemba tsiku lomwe mwayikila mkaka pa chiwiya chomwe mwasungiramo?
2. Zoyenera kuchita ndiziti kuti mkaka usamalike bwino tikamausunga pa mtunda?

Mayankho a mafunso otsogolera zokambirana

1. Kulemba kapena kuyika chizindikiro cha tsiku lomwe mwasungira mkaka mu chitini pa chitinipo kumathandiza kuti muthe kugwiritsa ntchito koyambirira mkaka omwe munayambirira kusunga, izi zimathandiza kuchepetsa kuonongeka kwa mkaka.

Sungani mkaka wammawere mu ziwiya zotsuka komanso zosalowa mpweya pa mtunda kwa maola osapitilira anayi, kudutsa nthawi iyiyi mkaka umaonongeka chifukwa chakuswana kwa tizilombo.

Sungani zakudya zophika mziwiya zosunga moto kuti zikhalebe zotentha

Zoyenera kuchita (Titani?)	Machitidwe ake (tichite motani?)
Onetsetsani kuti chakudya chonse ndichotentha (kutentha koposera 60°C) ngati chakudya chidyedwe posachedwa.	• Gwiritsani tchito kachipangizo koyezera katenthedwe ka zakudya kuti mudziwe ngati chakudya chikutentha pa mlingo woposera 60°C. vindikirani ndikuyika chakudya mu chiwiya chosunga kutentha kuti chakudya chikhalebe chotentha kwa kanthawi.

Mfundo zothandizira mphunzitsi

1. **Ndondomeko zosungira chakudya ku dera:** Kambiranani kasungidwe koyenera kachakudya ndi kuona ngati njirazo zimathandiza moyenera kupewa matenda odzera muchakudya.
2. **Nthawi yoyenera yomwe chakudya chingasungidwe mu filiji:** Onetsani nthawi yoyenera yomwe zakudya zopezeka kudera zingakhalire mufiliji zisanaonongeke.
3. **Kusamala chakudya chachiwisi posagwiritsa ntchito fuliji:** Tsindikani kufunika kopeza ndi kugwiritsa ntchito chakudya chachiwisi nthawi yomweyo ngati tilibe mozizilitsira monga fuliji.
4. **Njira yabwino yosungunulira nthuli zikuluzikulu zanyama youmitsidwa ndikuzizira:** Fotokozani ubwino osungunulira nthuli zikuluzikulu zanyama youmitsidwa ndikuzizira mosamala, monga kuyika mu filiji kapena mmadzi ozizira.
5. **Kumvetsetsa mlingo wakatenthedwe koyenera kamalo osungira chakudya:** Fotokozani za katenthedwe kamene kamalimbikitsa kuswana kwa tizilombo toononga chakudya (pakati pa 5°C ndi 60°C) ndi njira zomwe tingatsate kuti chakudya chisasungidwe pamlingo umenewu.
6. **Kuzizilitsa ndikusunga chakudya chotsala:** Fotokozani njira zozizilitsira chakudya mwachangu ndikusungira chakudya chotsala potsindika ubwino osatenthetsa chakudya koposera kamodzi.

NGODYA 5: GWIRITSANI NTCHITO MADZI NDI ZAKUDYA ZA UKHONDO

Kufunika kwake: Zinthu zogwiritsa ntchito pokonzera zakudya monga madzi, ayezi zikhoza kukhala ndi tizilombo kapena mankhwala amene akhoza kuononga chakudya chopangidwacho. Poizoni akhoza kupangika mu chakudya chotetemekatemeka kapena chomwe chili ndi chuku. Kusamala pakasankhidwe ka zinthu zogwiritsa ntchito kukonzera chakudya ndi njira zina monga kutsuka ndikusenda zakudya kungachepetse kuchuluka kapena kupezeka kwa poizoni mu chakudya.

KEY 5: GWIRITSANI NTCHITO MADZI NDI ZAKUDYA ZA UKHONDO

Zoyenera kuchita (Titani?)	Machitidwe ake (tichite motani?)
Gwiritsani ntchito madzi a pa mpopi kapena othirirana nthawi zonse mukafuna kutsuka zipatso kapena masamba, ziwiya za ku khitchini, kuphika kapena kukonza chakudya komanso kupanga zakumwa	▪ Madzi aukhondo ndi omwe athiridwa mankhwala opha tizilombo, omwe abwatitisidwa kapena omwe asefedwa. ▪ Kuti muphe tizilombo mmadzi tsatirani izi: • Bwatitsani madzi; • Thirani madontho atatu a mankhwala opha tizilombo m'madzi a 1 lita; • Gwiritsani ntchito kosefera madzi koyenera kuti muchotse tizilombo toyambitsa matenda. ▪ Onetsetsani kuti madzi anu asungidwa pamalo posafika ziweto kapena tizilombo monga udzudzu kuti madzi asaonongeke ndi kuyambitsa matenda

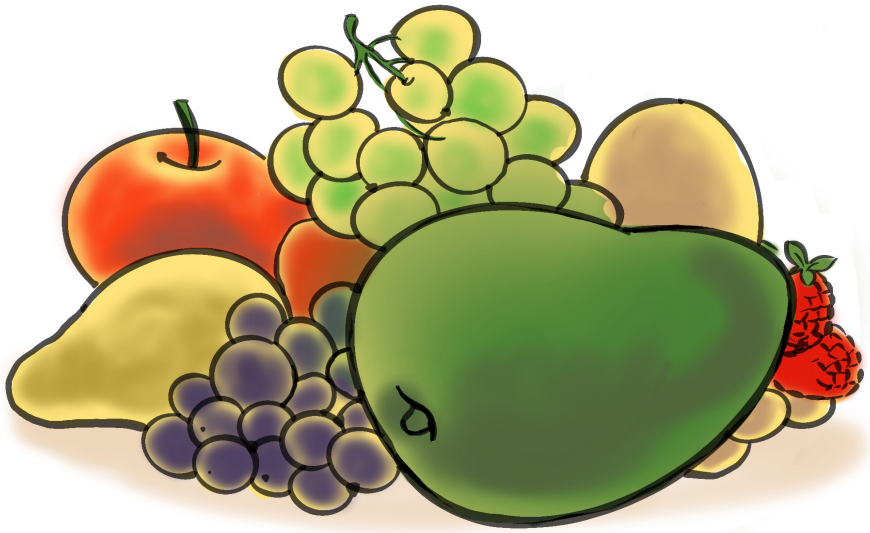
Mafunso otsogolera zokambirana

1. Kodi malo otungapo madzi osasamalika amadzetsa bwanji chiopsezo chamatenda odzera mu chakudya choonongeka?
2. Kodi ndi njira ziti zomwe zingagwiritsidwe ntchito pophera tizilombo mmadzi ogwiritsa ntchito pophika kapena kukonza chakudya komanso kutsukira zinthu?
3. kodi mlingo oyenera wa mankhwala opha tizilombo mmadzi pa madzi okwanira 1 lita ndi otani?

Mayankho a mafunso otsogolera zokambirana

1. Madzi otungidwa malo osasamalika amakhala ndi tizilombo toyambitsa matenda ndipo akagwiritsidwa ntchito kukonzera chakudya amaononga chakudyacho ndikuyambitsa matenda akudza Kamba kakudya chakudya choonongeka.
2. Tizilombo toyambitsa matenda mmadzi tikhoza kuthana nato pobwatitsa madzi; Thirani madontho atatu a mankhwala opha tizilombo mmadzi a 1 lita; Gwiritsani ntchito kosefera madzi koyenera kuti muchotse tizilombo toyambitsa matenda. Onetsetsani kuti madzi anu asungidwa pamalo posafika ziweto kapena tizilombo ndi dothi kuti madzi asaonongeke ndi kuyambitsa matenda.
3. kuthira madontho atatu a mankhwala opha tizilombo m'madzi a 1 lita kumapha tizilombo toyambitsa matenda m'madzi choncho madziwo amakhala aukhondo kuphikira ndi kutsukira ziwiya.

Sankhani zakudya zatsopano (za fresh) komanso zosaonongeka



Zoyenera kuchita (Titani?)	Machitidwe ake (tichite motani?)
Sankhani zakudya zopangira zakudya zina zosakhalitsa komanso zosaonongeka mwa njira ina iliyonse	• Sankhani zakudya zomwe sizidakhalitse, zosaphwanyika kapena kuonongeka kwina kulikonse • Tayani magawo a zakudya monga masamba kapena zipatso zimene zaphwanyika kapena zakandikakandika. • Pewani kugwilitsa ntchito zakudya zomwe zikuonetsa chuku kapena zizindikiro zakuonongeka. (Tsatanetsatane wanjira zopewera chuku mu mbewu zakumunda wapelekedwa m'musimu)

Mafunso otsogolera zokambirana

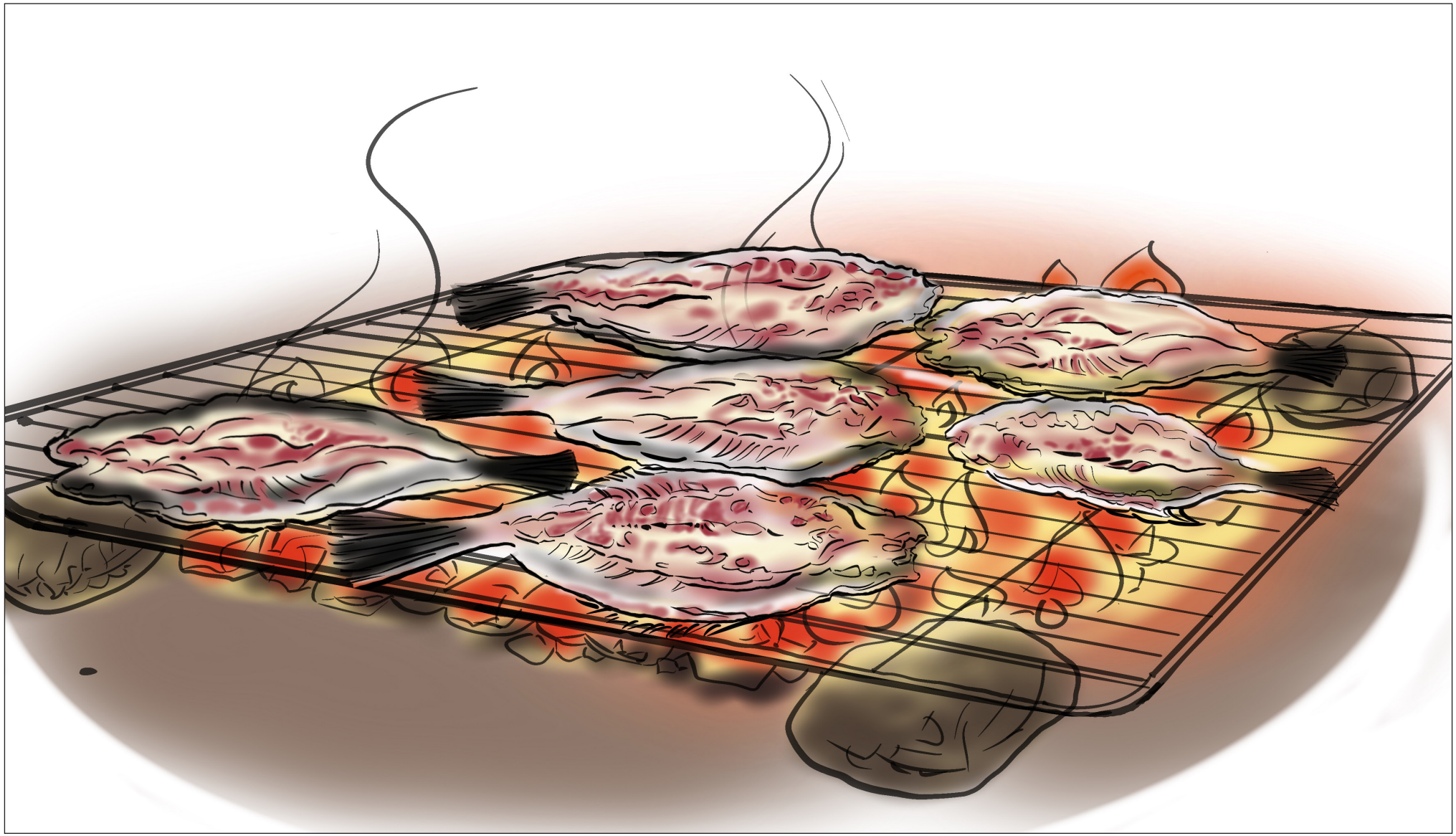
1. Ndi chifukwa chiyani kuli kofunika kupewa kugwiritsa ntchito zakudya zomwe zili zophwanyika komanso zikuonetsa chuku pokonza zakudya zina?
2. Kusankha ndi kugwiritsa ntchito zakudya zomwe zili zosaphwanyika kungachepetse bwanji kufala kwa matenda akudza kamba kakudya chakudya choonongeka?
3. Ndi zinthu ziti zomwe zikuyenera kutsatidwa mukamasankha zakudya zosakhalitsa komanso zathunthu zopangira zakudya zina?
4. Kuphwanyika kapena kukalika kwa zakudya monga masamba kapena zipatso zimaononga bwanji ubwino wa zakudyazi
5. Ndi zizindikiro ziti zomwe zimaonetsa kuti chakudya chaonongeka?
6. Ndi chifukwa chiyani kuli kofunika kumataya zakudya zomwe zikuonetsa zizindikiro za chuku?

Mayankho a mafunso otsogolera zokambirana

1. Kupezeka kwa chuku pa chakudya ndi chizindikiro choti chakudyacho chili ndi tizilombo komanso ziphe zomwe zikhoza kuyambitsa matenda.
2. Kusankha zakudya zamphumphu (zosasweka, zosaphwanyika, zosakalika) kumachepetsa chiopsezo cha tizilombo ndi chiphe chachuku zomwe zimaononga chakudya izi zimachepetsa matenda amu zakudya.
3. Sankhani zakudya zosakhalitsa, zosaphwanyika kapena kuonongeka kwina kulikonse kuti chakudya chikhale chabwino.
4. Pamalo pamene paphwanyika kapena kukalika mpamene tizilombo toononga chakudya timalowera zomwe zimapangitsa kuti chakudya chionongeke komanso chisasungike nthawi yayitali.
5. Zizindikiro zoonetsa kuonongeka kwa chakudya ndi monga chuku pa chakudya, fungo loyipa, kusintha kwa mtundu ndi kusakoma.
6. Kutaya zakudya zonse za chuku kumachepetsa kuchuluka kwa chuku ndi ziphe zina mu chakudya, zomwe zimapangitsa kuti chakudya chikhale chabwino.

A

KAKONZEDWE KA ZAKUDYA ZOMWE ZILI NDI KUTHEKERA KOKHALA NDI TIZILOMBO



KAKONZEDWE KA ZAKUDYA ZOMWE ZILI NDI KUTHEKERA KOKHALA NDI TIZILOMBO

Zoyenera kuchita (Titani?)	Machitidwe ake (tichite motani?)
Zakudya zomwe zili ndi kuthekera kokhala ndi tizilombo, zikuyenera kuphikidwa zisanadyedwe kuti zisapereke chiopsezo cha matenda kwa wakudyayo. Izi ziyenera kuchitika kwa zakudya zomwe zili ndi kuthekera kwakukulu kokhala ndi tizilombo monga nyama ndi mkaka osati zakudya zomwe zili ndi kuthekera kochepa monga masamba kapena zipatso zomwe zikhoza kudyedwa popanda vuto lirilonse ngati zatsukidwa ndi madzi aukhondo.	• Sankhani kudya zakudya zomwe zakonzedwa mu njira zakuti tizilombo tamuzakudyamo tafa monga mkaka obwatitsa • Pamene mukufuna kudya zakudya zaziwisi (zosaphika) zomwe zili ndi kuthekera kwakukulu kokhala ndi tizilombo monga nyama ndi mkaka, onetsetsani kuti zakonzedwa mu njira zakuti tizilombo tafamo.

Mafunso otsogolera zokambirana

1. Kukonza komanso kuphika zakudya zomwe zimakhala ndi tizilombo tambiri monga mkaka ndi nyama tisanadye zimathandiza motani kuti anthu adye chakudya chaukhondo?
2. Ndi zinthu ziti zomwe ziyenera kutsatidwa pomwe anthu akufuna kudya zakudya zaziwisi zomwe zili ndi kuthekera kokhala ndi chiopsezo chachikulu chokhala ndi tizilombo?
3. Ndi njira ziti zokonzera zakudya zomwe zili ndi kuthekera kochotseratu kapena kupheratu tizilombo toopsa toyambitsa matenda mu zakudya zomwe zimakhala ndi tizilombo tochuluka?

Mayankho a mafunso otsogolera zokambirana

1. Kuphika nyama ndi kutenthetsa mokwanira mkaka kumapha tizilombo toononga chakudya tomwe tikhoza kuyambitsa matenda.
2. Onetsetsani kuti zakudya zaziwisi zakonzedwa mu njira zakuti tizilombo tamuzakudyamo tafamo.
3. Kubwatitsa ndi kugwilitsa ntchito kachipangizo kotenthetsera zakudya ka magetsi (microwave) kamathandiza kupha tizilombo mu zakudya. .

B KUTSUKA MASAMBA NDI ZIPATSO

KUTSUKA MASAMBA NDI ZIPATSO

Zoyenera kuchita (Titani?)	Machitidwe ake (tichite motani?)
Tsukani zipatso ndi masamba moyenera ndi madzi aukhondo	• Tsukani zipatso ndi masamba moyenera ndi madzi aukhondo musanadye • Ikani chidwi pa zakudya zomwe zimadyedwa zili zosaphika monga saladi chifukwa zimapereka chiopsezo chochuluka.

Mafunso otsogolera zokambirana

1. Ndi chifukwa chiyani ndikoyenerabe kutsuka zakudya zilizonse zaziwisi ndi madzi aukhondo ngakhale zakudyazi zikuoneka zoyera?
2. Kugwiragwira kapena kusasamala zipatso ndi masamba mutatsuka kale kungapangitse bwanji kuti chakudya chisakhale chaukhondo?

Mayankho a mafunso otsogolera zokambirana

1. Kutsuka zakudya zilizonse zaziwisi ndi madzi aukhondo nkofunika chifukwa kutsuka kumachotsa tizilombo toononga chakudya tosaoneka ndi maso, fumbi ndi mankhwala otsalira ku mbewu.
2. Kusasamala chakudya mukatsuka monga kuyika malo omwe ali osasamalika, kugwilitsa ntchito ziwiya zakuda kumapereka mwayi oti tizilombo tomwe tingakhale m'manja ndi mu ziwiya tifalikirenso kuchakudya chotsuka kale.

C

TSIKU LOVOMEREZEKA LOTHERA KUGWIRITSA NTCHITO ZAKUDYA

TSIKU LOVOMEREZEKA LOTHERA KUGWIRITSA NTCHITO ZAKUDYA

Zoyenera kuchita (Titani?)	Machitidwe ake (tichite motani?)
Osadya kapena kugwiritsa ntchito zakudya zomwe zakhalitsa (zadutsa masiku ovomerezeka kudyera)	• Yang'anani masiku oyenera omwe chakudya chikuyenera kudyedwa ndi kutaya zakudya zonse zomwe zadutsa masikuwa. • Osadya zakudya zomwe zili mu mabotolo onika, ofufuma kapena adzimbiri chifukwa ndi zizindikiro zowonetsa kuti zakudyazi zayamba kuonongeka.

Mafunso otsogolera zokambirana

1. Kudya zakudya zomwe zadutsa masiku ake kumapereka bwanji chiopsezo chodwala matenda akudza kamba kakudya chakudya choonongeka?
2. Ndi chifukwa chiyani zitini zowonongeka siziyenera kusankhidwa tikamasankha zakudya za mchitini?

Mayankho a mafunso otsogolera zokambirana

1. Chakudya chakuti chadutsa nthawi yake yogwilitsidwa ntchito chikhoza kukhala ndi tizilombo komanso ziphe zoyambitsa matenda.
2. Zitini zonika, zofufuma kapena zadzimbiri zisagwilitsidwe ntchito kusungiramo zakudya chifukwa ndi zizindikiro zowonetsa kuti zivindikiliro zake nzosagwira bwino ntchito kapena nzoonongeka zomwe zikhoza kupangitsa kuti chakudya chionongeke.

NJIRA ZOTHANDIZA KUPEWA NDI KUCHEPETSA VUTO LA CHUKU NDI POIZONI WA CHUKU (CHUKUNKHODZO) MU ZAKUDYA ZAKUMUNDA

A ONETSETSANI KUTI MBEWU NDI YATHANZI

ONETSETSANI KUTI MBEWU NDI YATHANZI

Zoyenera kuchita (Titani?)	Machitidwe ake (tichite motani?)
Onetsatsani kuti mbewu ndi yathanzi	• Bzalani mbewu zogwirizana ndi dera mu nthawi yake • Gwiritsani ntchito mbewu yosaonongeka komanso mitundu yopilira kumatenda. • Thirani manyowa, fetereza kapena chitani kasinthasintha wa mbewu kuti nthaka isaguge. • Onetsetsani kuti nthaka ili ndi chinyontho chokwanira nthawi zonse pomwe mbewu ikukula pomathirira kapena kupanga zipangizo zokololera madzi. • Bzalani mbewu pa mipata yoyenera kuopetsa kuthinana • Gwiritsani ntchito njira zosiyanasiyana zothanirana ndi tizilombo toononga mbewu. • Thanani ndi tizilombo, matenda komanso tchire lowononga mbewu poyang'anira minda pafupipafupi komanso kuyika njira zothanirana ndi vuto likangodziwika kumene. • Limirani ndi kuzula tchire komanso mbewu zogwidwa ndi matenda mwansanga

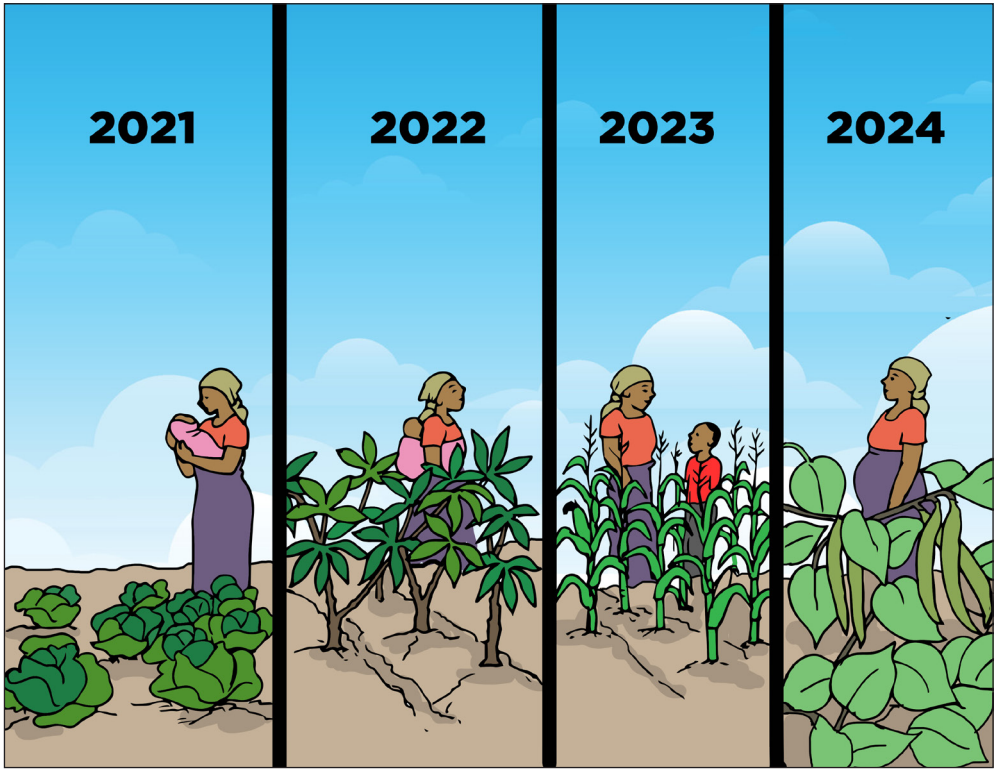
Mafunso otsogolera zokambirana

1. Kuonetsetsa kuti mbewu ikukula mwathanzi kumathandiza bwanji kuchepetsa kumera kwa chuku ndi chukunkhudzo mu mbewu?
2. Kasinthasintha wa mbewu amathandiza bwanji kuchepetsa matenda okhudza chuku mu nthaka?
3. Ndi chifukwa chiyani kulli kofunika kubzala mbewu zogwirizana ndi dera mu nthawi yoyenera?
4. Kubzala mbewu zopirira kumatenda kumathandiza bwanji kupititsa patsogolo thanzi la mbewu?
5. Kodi kupezeka kwa chinyontho choyenera nthawi zonse mmunda kumakhudza bwanji thanzi ndi kukula kwa mbewu?
6. Ubwino obzala mbewu pa mipata yoyenera ndi otani?

Mayankho a mafunso otsogolera zokambirana

1. Mbewu yathanzi imakhala ndi kuthekera kopilira ku chuku, matenda ndi tizilombo tina toononga mbewu.
2. Kasinthasintha wa mbewu amaonjezera chonde m'nthaka zomwe zimapangitsa kuti mbewu zikhale za thanzi komanso kasinthasinthayu amapangitsa kuti tizilombo tomwe tinali mu mbewu ina tife pamene tadzala mbewu ina yosiyana.
3. Kubzala mbewu zogwilizana ndi dera mu nthawi yoyenera kumathandiza kuti mbeu iche bwino mvula isanathawe.
4. Mbewu zopilira kumatenda sizigwidwa ndi tizilombo ndi matenda mwachisawawa choncho zimakula bwino ndikubweletsa zokolola zambiri.
5. Chinyontho choyenera chimathandiza kuti mbewu ikhale ya thanzi komanso ikule bwino.
6. Kubzala mbewu pamipata yoyenera kumachepetsa kulimbirana kwa mbewu pa zinthu zofunika kuti mbewu ikule bwino monga; chinyontho, michere ya mnthaka komanso kuwala. Mipata yoyenera ndiyofunikaso chifukwa mpweya umadutsa bwino pakati pa mbewu komanso imachepetsa kubuka kwa matenda okudza chifukwa chakuti nthaka sikukamuka.

B CHEPETSANI KUCHULUKA KWA CHUKU



CHEPETSANI KUCHULUKA KWA CHUKU

Zoyenera kuchita (Titani?)	Machitidwe ake (tichite motani?)
Chepetsani kuchuluka kwa chuku mu mbewu za mmunda kapena kumalo kosungira	• Limani mbewu zakasinthasintha osati imodzimodzi m'munda. • Gwiritsani ntchito mbewu zina, ziweto kapena mankhwala oteteza mbewu ku tizilombo ndi matenda moyenera • Zulani ndi kuotcha mbewu zomwe zagwidwa ndi matenda kuti tichepetse kufala kwa matenda. • Zokolola zisakhudzane ndi dothi (Gwiritsani ntchito njira za ukhondo pokolola mbewu) • Onetsetsani kuti matumba komanso malo osungira mbewu ndi zoyera komanso tizilombo taphedwamo musanagwiritse ntchito. • Thirani mankhwala kumbewu zomwe zasungidwa pakafunikira kutero. • Osatematema kapena kukhadula zipatso kapena masamba. Sungani zakudya pamalo ouma komanso aukhondo kuti zisamere chuku.

Mafunso otsogolera zokambirana

1. Ndi njira ziti zomwe tingatsate kuti tichepetse kuswana kwa chuku ndi tizilombo ku mbewu pomwe zili mmunda kapena mmalo osungira zitakoloredwa?
2. Kodi kukhala ndi malo abwino osungiramo mbewu kumathandiza bwanji kuchepetsa chukunkhodzo
3. Kodi kulima mbewu zakasinthasintha pamunda kumathandiza bwanji kuchepetsa kuswana kwa chuku ndi tizilombo tina toononga mbewu zikadali m'munda
4. Kodi ukhondo wa mmalo osungiramo zakudya umakhudza bwanji kubuka kwa chuku ndi tizilombo toononga mbewu mu mbewu zomwe zikusungidwa?
5. Kodi kukalika kwa zipatso ndi masamba kumalimbikitsa bwanji kuswana kwa chuku?

Mayankho a mafunso otsogolera zokambirana

1. Kuswana kwa chuku ndi tizilombo tina toononga mbewu kungachepetsedwe pogwiritsa ntchito njira monga : kulima mbewu zakasinthasintha, kugwiritsa ntchito mbewu ndi ziweto zina kuti zidye ndi kuononga tizilombo tina toononga mbewu tomwe tingalimbikitse kumera kwa chuku,kuchotsa ndi kuotcha mbewu zonse zomwe zagwidwa ndi matenda, kupewetsa kuti mbewu zisakhudzane ndi dothi, kutsuka komanso kuthira mankhwala malo onse osungiramo zakudya komanso matumba. Kuswana kwa chuku ndi tizilombo tina toononga mbewu kukhozanso kuchepetsedwa pothira mankhwala ku mbewu ngati kuli kofunikira kutero
2. Malo abwino osungiramo zakudya monga omwe ali ouma bwino, mozizira amapangitsa kuti chuku chisamere pa mbewu choncho vuto la chukunkhodzo pa mbewu limachepa.
3. Kulima mbewu zakasinthasintha pa munda kumachepetsa kuswana kwa chuku ndi tizilombo toononga mbewu posokoneza kapezekedwe ka chakudya ndi zinthu zina zofunika kuti tizilombo toononga mbewuto tizikula bwino. Mbewu zina zomwe zimabzalidwazo sizipereka chakudya komanso zinthu zofunika kuti tizilomboti tikule kapena kuswana.
4. Malo ndi matumba osamalika bwino osungiramo mbewu amachepetsa vuto la chukunkhodzo popititsa patsogolo ukhondo pomwe tinjere komanso zotsalira za mbewu yina yomwe inasungidwamo zimachotsedwa.
5. Kukalika kwa zipatso ndi masamba kumapereka mwayi kwa tizilombo tina toononga mbewu kuti tilowe mu mbewu pogwiritsa ntchito pokalikapo ndi kuoononga mbewuyo.

C

UMITSANI MBEWU MWACHANGU NDIPO ONETSETSANI KUTI ZISANYOWENSO

UMITSANI MBEWU MWACHANGU NDIPO ONETSETSANI KUTI ZISANYOWENSO

Zoyenera kuchita (Titani?)	Machitidwe ake (tichite motani?)
Umitsani mbewu mwachangu ndipo onetsetsani kuti zisanyowenso	• Kololani mu nthawi yoyenera (pomwe mbewu ndi zipatso zakhwima koma osati zitapsa kwambiri kapena kuyamba kuonnongeka). • Umitsiranitu mbewu mwachangu (mbewu za mgulu la chimanga kapena nyemba, zipatso ndi masamba) mutangokolola. • Sungani zokolola pamalo ouma (Onetsetsani kuti malo osungira mbewu ndi mopita mphepo, mosadontha, osagunthitsa matumba ku chipupa kapena kuyika pansi penipeni). • Tizilombo (makoswe, tizilombo touluka) tisafike kumalo omwe mwasungirako zakudya. • Osasunga zakudya pamalo pomwe mwasungiramo madzi, kapena momwe muli chinyezi kapena momwe mwasungiramo ziweto. • Gwiritsani ntchito mankhwala opopa chinyezi ku mbewu ($CaCl_2$) kuti m'malo mosungiramo mbewu musakhale chinyontho

Mafunso otsogolera zokambirana

1. Kuumitsa mwachangu chakudya kumathandiza motani kuteteza chakudya chomwe chasungidwa kuti chuku chisachulukane?
2. Kuyika timankhwala toyamwa chinyontho mmalo mosungiramo mbewu kumathandiza bwanji kuti malowo akhale abwino kusungiramo mbewu?
3. Ndi chifukwa chiyani kuli kofunika kukolola mbewu panthawi yoyenera nanga kuwumitsa mbewu mwansanga kumathandiza bwanji mbewu zosungidwazo?
4. Ndi zinthu ziti zomwe tikuyenera kuchita kuti mmalo mosungiramo mbewu musakhale chinyontho chambiri?
5. Ndi chifukwa chiyani zakudya siziyenera kusungidwa mmalo omwe mukusungamo madzi kapena mwachinyezi?

Mayankho a mafunso otsogolera zokambirana

1. Kuwumitsa mwachangu kumathandizira kuchotsa madzi msanga omwe amathandizira kuti tizilombo toyambitsa chuku tiswane.
2. Kuyika timankhwala toyamwa chinyontho m'malo mosungiramo mbewu kumathandiza kuti chinyontho chichepe zomwe zimapangitsa kuti tizilombo tisaswane.
3. Kukolola pa nthawi yoyenera nkofunika chifukwa kumachepetsa kuonongeka kwa mbeu ngati takokolola isanakhwime kapena kuonongeka kwa mbewu ndi mvula yomwe ingadze mbewu yo itauma kale. Kuwumitsa mwachangu pogwiritsa ntchito mphamvu ya dzuwa kapena kuwumitsa pa dzuwa mutayanika pa mphasa kumathandiza kuti mbewu isaonongeke.
4. Onetsetsani kuti malo osungira mbewu ndi mowuma komanso mopita mphepo, mosadontha, osagunditsa matumba ku chipupa kapena kuyika pansi penipeni). Tizilombo tisafike kumalo omwe mwasungirako zakudya. Gwiritsani ntchito mankhwala oyamwa chinyezi ku mbewu kuti m'malo mosungiramo mbewu musakhale chinyontho.
5. Kusunga mbewu m'malo achinyontho kapena momwe mumasungidwa madzi zimapangitsa kuti zokolola zizitapira chinyontho chamadziwo chomwe chikhoza kupeleka mwayi wa tizilombo kuswana.

D

TETEZERANI MAKHUNGU A MBEWU

TETEZERANI MAKHUNGU A MBEWU

Zoyenera kuchita (Titani?)	Machitidwe ake (tichite motani?)
Tetezerani makhungu a mbewu	• Gwirani mosamala zipatso, masamba ndi mbewu zina panthawi yokolola, yokonza kapena kututa kuti zisaphwanyike, kutemeka kapena kuonongeka munjira ina iliyonse. • Gwiritsani ntchito zipangizo zoyenera zolongedzera ndi njira zina zotetezera mbewu kuti makoswe ndi tizilombo tina tisaononge mbewuzo. • Onetsetsani kuti khungu la zipatso kapena mbewu silinaonongeke. • Gwiritsani ntchito zipangizo zoyenera pokolola ndipotuta kuti mbewu zisatemeke kapena kuphwanyika.

Mafunso otsogolera zokambirana

1. Kodi khungu la mbewu limathandiza bwanji kuti mbewu zitetezeke ku tizilombo?
2. Ndi njira ziti zimene tingatsate kuti khungu la mbewu litetezeke pa nthawi yokolola komanso yosunga mbewu?
3. Kodi kuonongeka kwa mbewu panthawi yotuta kungakhudze bwanji maonekedwe, kakomedwe ndi ubwino wa zipatso ndi masamba?
4. Kugwira mbewu mosamala kumathandizira bwanji kuti mbewu zisaonongeke?

Mayankho a mafunso otsogolera zokambirana

1. Khungu la mbewu limateteza kuti tizilombo toononga tisalowe mkati mwa mbewu.
2. Kuti khungu la mbewu litetezedwe; gwirani mosamala zipatso, masamba ndi mbewu zina panthawi yokolola, yokonza kapena kututa kuti zisaphwanyike, kutemeka kapena kuonongeka munjira ina iliyonse. Gwiritsani ntchito zipangizo zoyenera zoyikira ndi njira zina zotetezera mbewu kuti makoswe ndi tizilombo tina tisaononge mbewu. Onetsetsani kuti khungu la zipatso kapena mbewu silinaonongeke. Gwiritsani ntchito zipangizo zoyenera pokolola ndipotuta kuti mbewu zisatemeke kapena kuphwanyika.
3. Kuonongeka kwa mbewu pa nthawi yotuta kumaononga khungu la mbewu zimene zimapangitsa kuti tizilombo tipeze polowera ndikuononga mbewu.
4. Kugwira mbewu mosamala kumathandiza kuti khungu la mbewu lisaonongeke kudzera nkutemeka ndi kukalika zomwe zingapangitse kuti mbewu iwonongeke.

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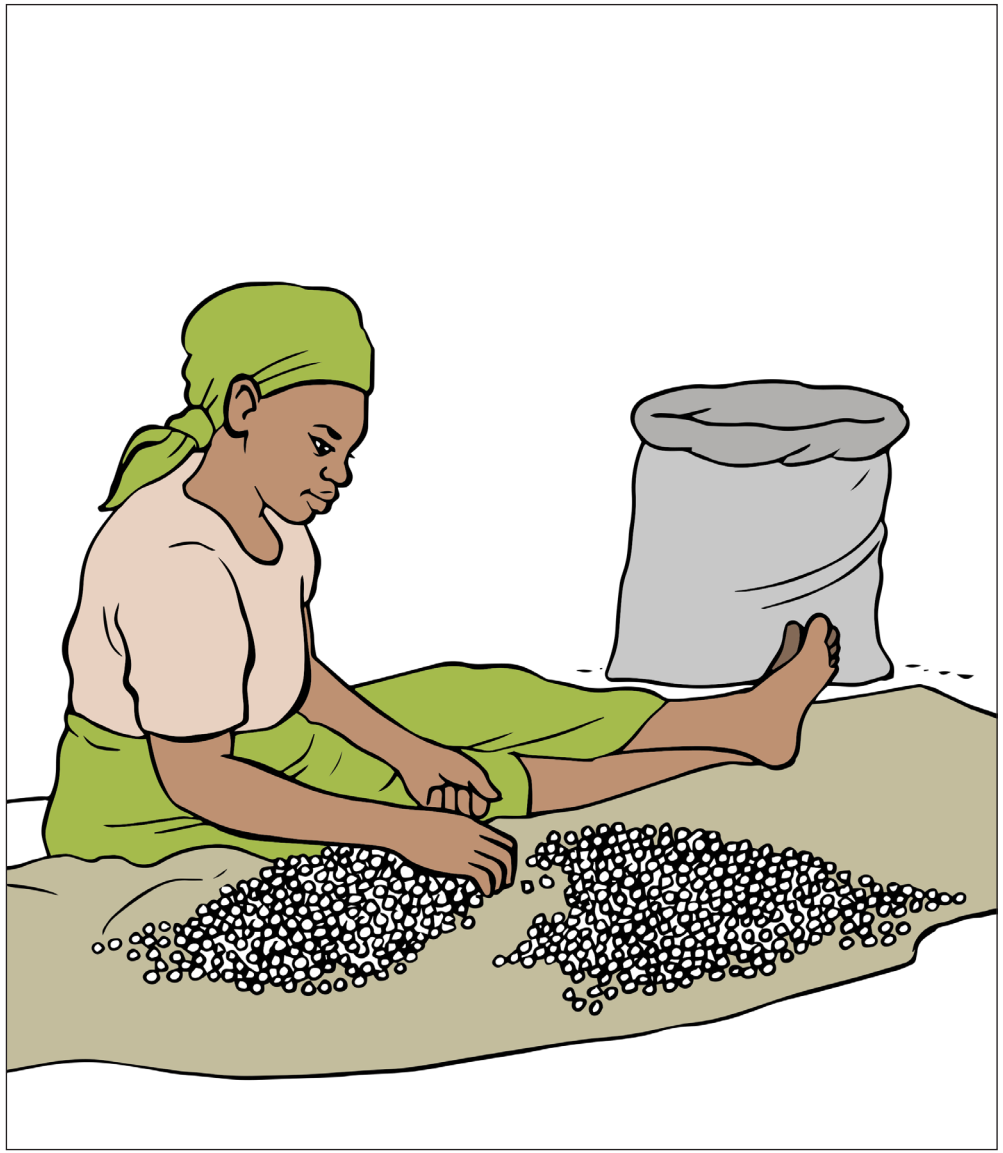
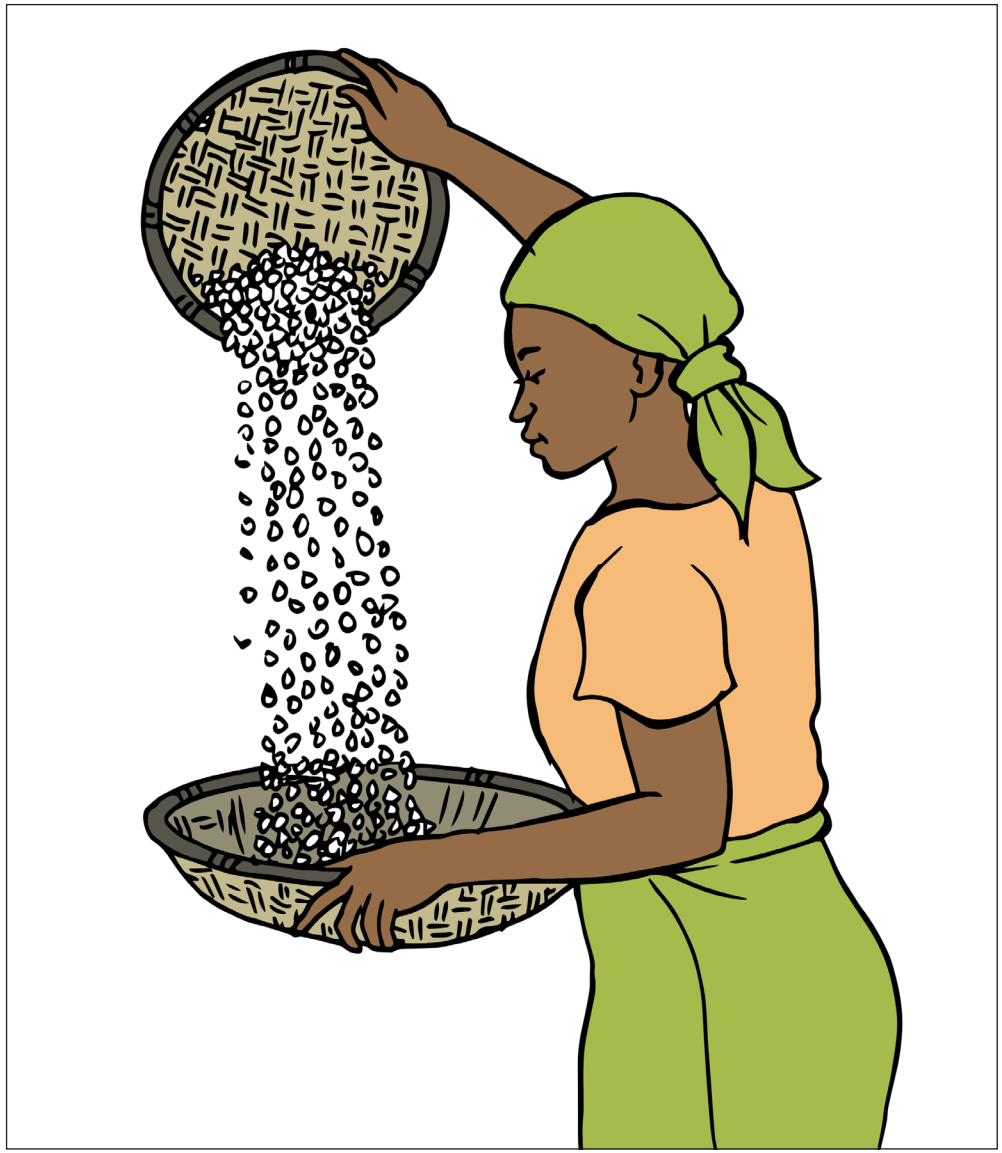
CHOTSANI KAPENA TSUKANI MAGAWO A CHAKUDYA AMENE ALI NDI CHIOPSEZO CHOKHALA NDI CHUKUNKHODZO





CHOTSANI KAPENA TSUKANI MAGAWO A CHAKUDYA AMENE ALI NDI CHIOPSEZO CHOKHALA NDI CHUKUNKHODZO

Zoyenera kuchita (Titani?)	Machitidwe ake (tichite motani?)
Chotsani kapena tsukani magawo a zakudya amene ali ndi chiopsezo chokhala ndi chukunkhodzo	• Sankhani ndi kutsuka mbewu kuti muchotse mbewu zamatenda, chuku kapena zophwanyika musanasunge. • Sankhani mbewu ndi zipatso kuti muchotse zosakhwima, zonyala ndi zophwanyika kapena zotemeka. • Sefani ndi kuchotsa zinyalala, dothi ndi zina zosafunika muzokolola. • Chotsani zipatso kapena masamba zotemeka, zopsetsa kapena zoonongeka musanasunge kapena kukagulitsa. • Petani kapena yandamitsani mbewu mmadzi kuti muchotse mbewu zopepuka ndi za chuku.

Mafunso otsogolera zokambirana

1. Kodi kusankha ndi kuchotsa mbewu zoonongeka kumathandiza bwanji kuchepetsa chukunkhodzo?
2. Ndi njira ziti zomwe zingathandize kuzindikira mbewu zomwe zili ndi chiopsezo chachikulu chokhala ndi ziphe zochokera ku chuku kuti zichotsedwe?
3. Kodi kupezeka kwa mbewu zosakhwima, zonyala ndi zophwanyika kumasokoneza bwanji ubwino wa mbewu?
4. Kodi zipatso ndi masamba zopsetsa ndi zoonongeka zimasokoneza bwanji ubwino wa zokololazi?
5. Kodi chukunkhodzo chopezeka mu chakudya ndi choopsa bwanji kumoyo wamunthu?

Mayankho a mafunso otsogolera zokambirana

1. Kusankha ndi kuchotsa mbewu zowonongeka kumachepetsa kuchuluka kwa tizilombo kapena chukunkhodzo mu chakudya.
2. Mbewu kapena magawo ambewu amene ali ndi chiopsezo chachikulu chokhala ndi chukunkhodzo zitha kuchotsedwa pogwilitsa ntchito njira monga; Kusankha, kupeta, kusefa ndi kuyandamitsa mbeu polekanitsa zoonongeka ndi zabwino.
3. Kupezeka kwa mbewu zosakhwima, zonyala ndi zophwanyika kumapereka chiopsezo cha tizilombo, chuku komanso chukunkhodzo choononga mbeu.
4. Zipatso ndi masamba zoonekeratu kuti ndi zopsetsa ndi zoonongeka zimasunga tizilombo ndi chuku ndipo zimapereka chiopsezo cha tizilombo ndi chuku choononga mbewu zina m'malo osungira.
5. Chukunkhodzo mu zakudya chimayambitsa matenda osiyanasiyana monga khansa, kuonongeka kwa chiwindi ndi matumbo.

Mfundo zothandizira mphunzitsi

1. **Kuzindikira komwe anthu amatunga madzi:** Dziwani kumene anthu amakatunga madzi, kambiranani m'mene anthu amasamalira madzi mdera lanu ndipo tsindikani kufunika kogwiritsa ntchito madzi aukhondo pokonza chakudya.

2. **Kulimbikitsa kugwiritsa ntchito zakudya zokololedwa kapena zophikidwa kumene:** Tsindikani kufunika kosankha ndikugwiritsa ntchito zakudya zosaonongeka pokonza zakudya zina.

3. **Kakonzedwe ka zakudya zomwe zili ndi kuthekera kokhala ndi tizilombo**: Phunzitsani anthu njira zosamalika zokonzera zakudya zomwe zili ndi kuthekera kokhala nditizilombo.

4. **Kuyang'anira thanzi la mbewu ndi kasungidwe kabwino:** Ophunzitsa adziwe m'mene anthu amdera amasalira mbewu ndipo apereke uphungu oyenera okhudza m'mene angapewere chuku mu mbewu ndi mu zokolola.

5. **Kasungidwe koyenera ka mbewu:** Limbikitsani njira zochepetsera kuchulukana kwa chuku ndi chukunkhodzo pogwiritsa ntchito njira monga kuumitsa, kuyika mchere ndi zina makamaka m'madera omwe zipangizo zozizilitsira ndi zosowa.