This is another day, O Lord. I know not what it will bring forth, but make me ready, Lord, for whatever it may be. If I am to stand up, help me to stand bravely. If I am to sit still, help me to sit quietly. If I am to lie low, help me to do it patiently. And if I am to do nothing, let me do it gallantly.

Make these words more than words, and give me the Spirit of Jesus. Amen.
STEWARDSHIP OF LIFE

A Guide to Healthy Living and Preparation for the End of Life

Church of the Nativity Huntsville
STEWARDSHIP OF LIFE

Deacon Robert A. Serio, MD

Church of the Nativity Huntsville
Stewardship of Life

- Week 1 - Healthy Living
- Week 2 - What Slows Us Down
- Week 3 - Legal Stuff
- Week 4 - End of Life Issues
Some days you eat salads and go to the gym, some days you eat cupcakes and refuse to put on pants. It's called balance.
STEWARDSHIP OF LIFE
HEALTHY LIVING

- Diet
- Exercise
- Sleep
- Spirituality
- Health Screening
- Vitamins

- Immunizations
- Aspirin
- Statins
- Alcohol
- Social Networking
STEWARDSHIP OF LIFE
HEALTHY LIVING

■ Diet
  - Need to maintain Caloric Balance to maintain healthy weight
  - Obesity associated with premature mortality, Cardiovascular disease, Diabetes, Hypertension
  - USDA Guidelines
    ■ 45-60% Carbohydrates
    ■ 10-35% protein
    ■ 20-35% fat
STEWARDSHIP OF LIFE
HEALTHY LIVING

Diet

- Carbohydrate
  - Foods with high glycemic index increased risk of Type 2 Diabetes, Coronary artery disease, Cancer
    - (i.e. pizza, white rice, pancakes, potatoes)
    - Low glycemic foods include fruits and vegetables
  - Added sugar should be < 10% total calories
  - Naturally occurring sugars (fruit, milk) not considered added sugars
    - Still need to limit foods such as fruit juices)
STEWARDSHIP OF LIFE
HEALTHY LIVING

■ Diet
  - Proteins
    ■ Should eat variety of protein rich foods
    - Fish, lean meat, poultry, eggs, beans, soy, unsalted nuts/seeds
    - Red meat associated with increased mortality
    - Need to avoid protein with unhealthy fat (fatty cuts of meat, high fat dairy products-processed meats)
Diet

- Fats
  - Type of fat more important than amount of fat
    - *Trans fats contribute to Coronary artery disease*
      - Margarine and processed/fast food
    - *Polyunsaturated fats may be protective*
      - One to two servings of oily fish per week
  - Trans fat, saturated fat and cholesterol may affect plasma cholesterol
    - *Association of LDL cholesterol with incidence of coronary artery disease*
    - *Limited data that dietary interventions improve outcomes*
Diet

- **Fiber**
  - Recommended amount 25-36 grams/day
  - Whole grains have higher fiber content
  - High fiber reduces coronary heart disease and stroke risk by 40-50%
    - *Lower insulin levels, improve lipid levels, lower blood pressure*
    - *Protective effect against Diabetes*
    - *Protective effect against colon cancer*
    - *Reduction in all cause mortality*
STEWARDSHIP OF LIFE
HEALTHY LIVING

■ Diet
  - Sodium—recommended <2300 mg daily
    ■ Salt preserved foods increased risk of stomach cancer
  - Calcium/Vitamin D
    ■ Recommended 1200 mg plus 600-800 units Vitamin D
      - Needed for normal skeletal homeostasis
    ■ Fruit and vegetable consumption associated with lower risk of coronary artery disease
      - Cruciferous vegetable (broccoli, cabbage, cauliflower, Brussels sprouts) green leafy vegetables, citrus fruits, and vitamin C rich fruits and vegetables
STEWARDSHIP OF LIFE
HEALTHY LIVING

Diet

- Few studies comparing different diets
- Risk/benefit of gluten restricted diet in non-celiac persons unknown
- Low-fat diet
- DASH diet
- Mediterranean diet

Vegetarian diets

- Macrobiotic
- Semi-vegetarian
- Lacto-ovovegetarian
- Lactovegetarian
- Vegan

WHO guidelines – limit saturated and trans fat and free sugars-increased life expectancy
Exercise for Healthy Living

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Exercise

- **Physical activity ≠ Exercise**
  - Physical activity=body movement that increases energy expenditure above a basal level. Includes occupational, household, leisure time and transportation.
  - Exercise= physical activity that is planned, structured, repetitive and purposeful with objective of improvement or maintenance of physical fitness.
  - Measured in Metabolic Equivalents (3.5 ml O2/kg/min). One MET ~ sitting at rest.
Exercise

Moderate physical activity = 3-6 METS

Vigorous physical activity => 6 METS
Leisure activity energy expenditure in metabolic equivalents (METs)
Activity Mean Range

Archery 3.9 3 to 4
Backpacking -- 5 to 11
Badminton 5.8 4 to 9+
Basketball
Gameplay 8.3 7 to 12+
Non-game -- 3 to 9
Billiards 2.5
Bowling -- 2 to 4
Boxing
    In-ring 13.3
    Sparring 8.3
Canoeing, rowing, kayaking -- 3 to 8
Conditioning exercise -- 3 to 8+
Climbing hills 7.2 5 to 10+
Cricket 5.2 4.6 to 7.4
Croquet 3.5
Cycling
    Pleasure or to work -- 3 to 8+

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Dancing (social, square, tap) -- 3.7 to 7.4
Dancing (aerobic) -- 6 to 9
Fencing -- 6 to 10+
Field hockey 8.0
Fishing
   From bank 3.7 2 to 4
   Wading in stream -- 5 to 6
Football (touch) 7.9 6 to 10
Golf
   Power cart -- 2 to 3
   Walking (carrying bag or pulling cart) 5.1 4 to 7
Handball -- 8 to 12+
Hiking (cross country) -- 3 to 7
Horseback riding
   Galloping 8.2
   Trotting 6.6
   Walking 2.4
Horseshoe pitching -- 2 to 3
Exercise

- Physical inactivity associated with poor health outcome
- 1/5 adults physically inactive
- More common in developed countries, among women, older persons and lower incomes
- In US 55% waking hours in sedentary behaviors
- Physical inactivity estimated to cause 9% of premature mortality
- Inactivity associated with diabetes, cardiovascular disease and cancer.
Exercise
- Exercise in midlife associated with decreased risk of chronic conditions in the last 5 years of life
- As little as 1-2 75 min exercise sessions per week decreased all cause cardiovascular and cancer related mortality
- Vigorous exercise (20 min 3 times a week) combined with moderate daily exercise associated with 50% reduction in mortality and increased life expectancy by 1.5-3.7 years
- Exercise can improve blood pressure, reduce the risk of stroke and prevent the development of diabetes.
Exercise

- Exercise can increase bone density and reduce the risk of hip fractures
- Exercise may reduce the risk of dementia and cognitive decline in older patients
- Exercise can reduce stress, anxiety, and depression.
Exercise Risks

- *Most common risk musculoskeletal injury*
  - Overuse and previous injury
- *Cardiac rhythm problems*
  - Usually in persons with previous history of coronary heart disease or arrhythmia
- *Sudden Death*
  - rare (1.5 per 36 million hours) but can also occur with sexual activity
- *Hyperthermia and dehydration*
- *Long term benefits outweigh risks*
Exercise
- Screening medical evaluation before exercise not necessary if no symptoms and low risk for coronary artery disease
- Screening may be appropriate for
  - Elevated cholesterol
  - Hypertension
  - Smoking
  - Diabetes
  - History of premature MI or cardiac death in first degree relative <60 yo
Exercise Prescription

- *Recommend weekly goal of 150 min moderate activity or 75 min vigorous activity*
- *Little data showing one activity better than another (no difference in running or walking as long as same energy expenditure)*
- *Need to select activity that the patient enjoys to maximize likelihood of continued activity*
- *Home based programs may result in better adherence due to cost and convenience but some need the incentive of group activity.*
Exercise Prescription

- Sedentary person should start slow and gradually increase until goal is reached.
- Adults with poor mobility should remain as active as their condition allows and include exercises to help balance and prevent falls.
- Resistance (strength) training adds to aerobic training for CV fitness
- Markers of an adequate degree of exercise include
  - Breathlessness
  - Fatigue
  - Sweating
  - Achievement of a “target heart rate” is not necessary.
STEWARDSHIP OF LIFE
HEALTHY LIVING

■ Exercise Strategies
  - *Work toward goal of 150 min moderate or 75 min vigorous activity*
  - *Choose exercise to reduce risk of injury*
  - *Maximize incentives to maintain a constant exercise program*
  - *Stretching*
    - No evidence that it reduces muscle soreness but no downside
  - *Cool Down*
    - May facilitate lactate removal and allow gradual return of blood to central circulation
  - *Balance training exercises improve stability and reduce risk of falls*
Healthy Living-Sleep

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STEWARDSHIP OF LIFE
HEALTHY LIVING

■ Sleep
  - SUFFICIENT sleep essential for optimal health, immune function, mental health and cognition.
  - Optimal sleep for adults is $7 \frac{1}{2}$ to 8 hours regardless of age.
  - Infants, children and teenagers require more (at least 9 hours for teens).
  - Insufficient sleep is a public health problem
    ■ 30% adults report < 6 hours per night
      - Rates may be higher in teens, military, certain socioeconomic groups and occupations
Insufficient Sleep Effects
- Cognition
  - May present with signs of dementia
- Mood and judgement
  - Poor mood, irritability, low energy
- Sleepiness
  - Microsleeps
  - Accidents (auto, train, ships)
- Quality of life
  - Problems at work
  - Marital discord
STEWARDSHIP OF LIFE
HEALTHY LIVING

■ Insufficient Sleep
  - *Cardiovascular Effects*
    ■ Hypertension, MI, Stroke
  - *Effects on the Immune system*
    ■ Reduced response to vaccines
    ■ Increased risk of viral infection
  - *Obesity and Metabolic problems*
    ■ Rat studies show weight gain
    ■ Human studies suggestive
    ■ Association with diabetes
STEWARDSHIP OF LIFE
HEALTHY LIVING

■ Sleep Hygiene
  - Regular sleep/wake schedule including weekends
  - Set a bedtime routine
  - Avoid naps if you have problems sleeping at night
  - Sleep environment conductive to sleep
    ■ Not an office or dining room
    ■ Television and light sources need to be minimized
    ■ Temperature control
  - Avoid caffeine, alcohol and heavy meals before bedtime

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STEWARDSHIP OF LIFE
HEALTHY LIVING

Spirituality (Exercises for the Soul)

- **Prayer**
- **Sabbath Time**
  - Meditation
  - Centering Prayer
  - Labyrinth

- **Study**
  - Bible Study
  - Seminars

- **Community**
  - Worship
  - Outreach
  - Inreach

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Healthy Living
Health Screening

- Blood cholesterol test
- Blood pressure check
- Endoscopy
- Body skin exam
- Fasting plasma glucose
- Glaucoma test
- Thyroid hormone test

Patient Health Questionnaire (2 & 9)

<table>
<thead>
<tr>
<th>Problem</th>
<th>Not at all</th>
<th>Several days</th>
<th>More than half the days</th>
<th>Nearly every day</th>
</tr>
</thead>
<tbody>
<tr>
<td>Little interest or pleasure in doing things</td>
<td></td>
<td></td>
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<tr>
<td>Feeling down, depressed, or hopeless</td>
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<tr>
<td>Trouble falling or staying asleep, or sleeping too much</td>
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<tr>
<td>Feeling tired or having little energy</td>
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<tr>
<td>Poor appetite or over eating</td>
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<tr>
<td>Feeling bad about yourself - or that you are a failure or have let yourself or your family down</td>
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<tr>
<td>Trouble concentrating on things, such as reading the newspaper or watching television</td>
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<tr>
<td>Moving or speaking so slowly that other people could have noticed, or the opposite - being so fidgety or restless that you have been moving around a lot more than usual</td>
<td></td>
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</tr>
<tr>
<td>Thoughts that you would be better off dead, or of hurting yourself in some way</td>
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</tr>
<tr>
<td>How difficult have these problems made it for you to do your work, take care of things at home, or get along with other people?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Score: 14
Severity Level: Moderate Depression
Difficulty Level: Somewhat difficult

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HEALTHY LIVING

- Health Screening
  - Average life expectancy has increased to > 80 yo
  - 80% elderly adults have one chronic disease, 50% have 2
  - Many healthy elderly adults so age alone not a factor in screening
  - When considering screening- concept of lag time to benefit important
    - colon and prostate cancer
STEWARDSHIP OF LIFE
HEALTHY LIVING

■ Health Screening
  - Short term issues (maintain/restore current health status)
    ■ Symptom management
    ■ Care coordination
    ■ Personal safety
    ■ Evaluate living situation
  - Mid range issues (assess needs over next 1-5 years)
    ■ Preventative care
    ■ Disease management
    ■ Psychosocial issues
    ■ Coping strategies
  - Long Range for adults currently healthy and high functioning
    ■ Plans to be implemented at time of eventual decline
HEALTHY LIVING

- Health Screening
  - Prostate cancer
    - USPSTF does not recommend prostate cancer screening
      - Certain individuals may be candidate but not after age 69
      - No improvement in mortality screened vs not screened
  - Colorectal Cancer
    - Most recommended screening for ages 50-75 with average risk
    - Most recommend no screening if life expectancy < 10 years
    - Most recommend no screening after age 85
STEWARDSHIP OF LIFE
HEALTHY LIVING

- Health Screening
  - Breast Cancer
    - Screening every 2 years as effective as annual screening
    - American Geriatrics Society recommends no screening if life expectancy < 10 years
  - Cervical Cancer
    - Recommended if never had a PAP smear
    - Recommend stopping age 65 if previous screening negative and low risk
STEWARDSHIP OF LIFE
HEALTHY LIVING

■ Health Screening
  - *Lung Cancer*
    ■ Screening recommended for adults 55-74 with a 30 pack year history of smoking or who stopped < 15 years ago
    ■ Low dose CT scan annually
HEALTHY LIVING

- **Health Screening**
  - **Blood pressure**
    - Annual screening recommended
    - Target blood pressure 125-130/90
    - Initial treatment reduce salt, weight loss, stop certain meds (NSAIDs)
  - **Lipid screening**
    - Can identify people at risk for CAD and therapy may decrease the risk
  - **AAA**
    - One time ultrasound for men 65-75 who have ever smoked or have a first degree relative with AAA
    - No recommendation for women or non-smokers
  - **Diabetes**
    - Screening recommended for age 40-70 with BMI>25 or with HTN or hyperlipidemia
STEWARDSHIP OF LIFE
HEALTHY LIVING

■ Health Screening
  - Assess for impairment of ADL
    ■ Can be associated with risk of falls, depression, NH placement and death
  - Cognitive Assessment
    ■ No evidence that screening for dementia in absence of symptoms improved outcomes
    ■ Recommended only with memory complaints or functional impairment
  - Depression
    ■ Suicide rates twice as high for elderly and greatest for men>85
    ■ Generally complain of somatic complaints (sleeping, eating, fatigue, low energy)
STEWARDSHIP OF LIFE
HEALTHY LIVING

- Health Screening
  - Osteoporosis
    ■ Low bone mineral density in 37% women and osteoporosis in 7%
    ■ Screening recommended for all women >65 yo and men with low trauma fractures, loss of height or risk of fractures
  - Vision Screening
    ■ Low vision common and assoc. with decline in health, function and quality of life and can lead to falls, decline in cognition and depression
    ■ Routine vision screening not recommended in asymptomatic unless decline in cognitive function, falls or functional impairment
  - Hearing screening
    ■ Not indicated in asymptomatic adults
STEWARDSHIP OF LIFE
HEALTHY LIVING

- Nutrition Screening
  - 15% outpatients and 50% hospitalized patients malnourished
    - Medical causes, medication, dental problems, food scarcity, functional issues, poor appetite, swallowing problems

- Falls and mobility
  - 30% non-institutionalized adults fall each year
  - Up to 80% in persons over 80
  - Risk factors include postural changes, decreased vision, cognitive impairment, medications, muscle diseases and environmental factors
  - “Get up and Go” test

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Medication Use

- Adults > 65 take 3-5 medications, some as many as 20
- Many include OTC and herbal meds
- Multiple physicians each treating different problems
- Many medications increased risk with increased age
- Some meds have duplicate therapeutic effect or can interact with other meds
- Cost will often prevent patients from taking essential meds
- Need a comprehensive evaluation at least annually of all prescription and OTC meds (family MD or regular pharmacist)
STEWARDSHIP OF LIFE
HEALTHY LIVING

- **Home Safety Assessment**
  - 90000 per year died due to unintentional injury
    - ½ falls
    - 14% due to motor vehicle accidents
    - Poisoning, fire and suffocation may be due to cognitive changes, isolation

- **Driving**
  - Adults over 70 suffer more auto accidents and fatal driver/pedestrian accidents
  - May benefit from formal driving assessment by occupational therapist

- **Financial and Social support**
  - Social isolation due to functional limitations, lack of relatives, limited resources
  - Can be associated with high rates of depression, anxiety, disability
How to avoid falling at home

This picture shows some of the things that can cause a fall in your home. Look around and remove any loose rugs, electrical cords, clutter, or furniture that could trip you.
Medicare Preventative Visit
- 2005 Medicare authorized one time payment for a Preventative Physical Examination
- Key components
  - Medical and surgical history
  - Risk factors for depression and mood disorders
  - Functional ability and safety
  - Physical exam to include height, weight, BMI, BP, visual acuity
  - End of Life planning
  - Education, counseling and referral based on issues identified
  - Orientation to available protective services
STEWARDSHIP OF LIFE
HEALTHY LIVING

- Diet
- Exercise
- Sleep
- Spirituality
- Health Screening
- Vitamins

- Immunizations
- Aspirin
- Statins
- Alcohol
- Social Networking
Vitamins
- Multimillion dollar industry
- Advertising on television, books and magazines
- “Vitamins will make you live longer, look better and have a better sex life”
- No evidence that adults eating a balanced diet, getting adequate sun exposure and drinking Vit D fortified dairy products need vitamin supplements
- There is no evidence that taking 50-200% of RDA will be harmful
Vitamins

- **Recommended for**
  - third world countries with poor diets (Haiti)
  - Persons in Western society with osteoporosis, vegans, new immigrants, very poor, alcoholics, malabsorption syndromes, gastric bypass, certain genetic defects and patients on hemodialysis.

- *No evidence that vitamins can prevent cancer, atherosclerosis or enhance immune system.*

- *High doses of certain vitamins (A, E, C and D (>4000 mg daily) may be harmful*

- *Measuring blood levels inexact science and not recommended for routine screening.*
STEWARDSHIP OF LIFE
HEALTHY LIVING

- Immunizations
  - Influenza
    - >90% of influenza deaths occur in person >60 yo
    - Influenza vaccine recommended for all ages
    - No evidence that vaccination causes “FLU”. May get febrile reaction and flu-like symptoms
    - Reduced incidence of other viral illness after vaccine
    - Not 100% effective (different strains)
Stewardship of Life
Healthy Living

- Immunizations
  - *Pneumococcal vaccine*
    - Increased mortality after age 50
    - 2 types (23 valent (PPSV23) and 13 valent (PCV13))
      - Both recommended sequentially
    - Does not prevent all causes of pneumonia
  - *Herpes Zoster (shingles) vaccine*
    - 30% incidence of shingles that increases with age
    - Complications include pain, encephalitis, myelitis, nerve palsy
    - Recommended for all adults >60 unless immunocompromised
Immunizations

- **Tetanus Vaccine**
  - Rare but patients >60 account for 60% cases
  - Recommend booster every 10 years
  - Pertussis added to vaccine for adults who have contact with infants under 1 yo (grandparents, childcare providers and health care workers)

- **Other vaccines**
  - Other vaccines may be recommended depending on occupation or travel
  - **Hepatitis A/B**
  - **Typhoid**
  - **Varicella**
  - **Meningiocal**
  - **H. Flu**
[^] Aspirin

- *Aspirin may decrease risk of cardiovascular disease and certain cancers*
- *Reduced risk for first MI in men and first ischemic stroke on women*
- *Long term data suggests reduction in colon and rectal cancer with long term aspirin use. Also reduction in overall cancer mortality.*
- *Can be associated with increased risk of gastrointestinal bleeding*
- *Recommended for adults 60-69 with low risk for bleeding and life expectancy > 10 years.*
- *NEED TO DISCUSS WITH FAMILY PHYSICIAN*
STATENSHIP OF LIFE
HEALTHY LIVING

■ Statins
  - Work by limiting cholesterol production which will affect production of LDL cholesterol
  - Recommendations vary but most recommend therapy for age 40-75 with 7-10% risk MI/stroke over next 10 years
    ■ Also for known cardiac disease, diabetes or high levels cholesterol
  - Side effects include muscle soreness/weakness/inflammation and necrosis.
  - Hepatic (liver) abnormalities can occur
  - NEED TO DISCUSS WITH FAMILY MD
STEWARDSHIP OF LIFE
HEALTHY LIVING

- Tobacco
  - DON’T
  - Strong evidence of association with cardiac disease, cancer and emphysema
  - Formal programs with pharmacotherapy better success than self monitored
STEWARDSHIP OF LIFE
HEALTHY LIVING

- Alcohol
  - ~50% adults > 65 consume alcohol
  - 14.5 % drink more than recommended (<7 drinks/week)
  - 53% drinkers may have a harmful pattern of consumption
  - Risk factors for alcohol abuse include bereavement, depression, anxiety, pain, disability, sleep problems or prior history of alcohol abuse.
STEWARDSHIP OF LIFE
HEALTHY LIVING

- **CAGE** Questionnaire for Substance Abuse

- Have you ever felt you should **Cut down** on your drinking?
- • Have people **Annoyed** you by criticizing your drinking?
- • Have you ever felt bad or **Guilty** about your drinking?
- • Have you ever taken a drink first thing in the morning (**Eye-opener**) to steady your nerves or get rid of a hangover?
STEWARDSHIP OF LIFE
HEALTHY LIVING

- Social Networking-positive and negative effects
  - Addiction
    - Can take energy away from work, physical activity or face to face relationships
  - Emotional impact
    - Most browsing emotionally neutral but can cause increased stress. (ie cyber bullying)
    - Can allow interactions with elderly, military family, shopping
  - Physical problems
    - Carpal tunnel, eye strain, fatigue, lack of sleep, lack of exercise, distracted driving
  - Access to Health information
Staying Healthy on Social Media

- Use only at scheduled times, not at work or as a substitute for offline relationships
- Use productivity apps that limit access to certain times. May need professional help
- Research health issues but always discuss with your doctor before following online advise
- Do not use social media when driving, operating heavy equipment or responsible for the care of others
- Don’t waste time arguing with people online
STEWARDSHIP OF LIFE
HEALTHY LIVING

- Diet
- Exercise
- Sleep
- Spirituality
- Health Screening
- Vitamins

- Immunizations
- Aspirin
- Statins
- Alcohol
- Social Networking
STEWARDSHIP OF LIFE
HEALTHY LIVING

■ Resources
  - www.uptodate.com
  - www.webmd.com
  - www.mayoclinic.org
  - www.cdc.gov
Stewardship of Life

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STEWARDSHIP OF LIFE
HEALTHY LIVING

Questions