GOOD HEALTH AND WELLNESS

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BRAIN FITNESS TEST

LOOK → SNAP → IMAGRY

Beach  Cigar
Professor  Nun
Horse  Palm Tree
Teddy Bear  Pasta
HEALTHY AGING
DEFINITIONS*

Successful Aging
Absence of disease and disability; high cognitive and physical functioning; and active engagement with life. (Rowe and Kahn)

Optimal Aging
The capacity to function across many domains – physical, functional, cognitive, emotional, social, and spiritual – to one’s satisfaction and in spite of one’s medical conditions.

*Annals of Long Term Care, November 2007
How can we do to stay healthy and maintain a good quality of life?
THE AGELESS DICK CLARK MAKES HIS ANNUAL PAYOLA INSTALLMENT
Attitude

Diet

Exercise
FACTORS CONTRIBUTING TO GOOD HEALTH

- Genetics
- Environment
  - Air, water
- Psychosocial Factors
  - Resiliency vs. Depression
- Lifestyle
  - Diet, weight, smoking, exercise
- Aging
Genetics

Very little control (at this time) over, but a lot can be done to maintain the best quality of life.

Not so much how long we live but how we live!!

“The Bucket List”
FACTORS CONTRIBUTING TO GOOD HEALTH

- Genetics
- Environment
  - Air, water
- Psychosocial Factors
  - Resiliency vs. Depression
- Lifestyle
  - Diet, weight, smoking, exercise
- Aging
CHINA

Ambient air pollution has made cancer China’s leading cause of death!

Only 1% of the country’s 560 million city dwellers breathe safe air.

USA Today August 2007
FACTORS CONTRIBUTING TO GOOD HEALTH

- Genetics
- Environment
  - Air, water
- Psychosocial Factors
  - Resiliency vs. Depression
- Lifestyle
  - Weight, diet, smoking, exercise
- Aging
Societal Challenges

RUSSIA
LIFE EXPECTANCY - MALE

- 1990 - 64 years
- 1995 - 57 years
Resilience: Dealing with Adversity

Resilience is the ability:

• to bounce back swiftly and fully from distressing events

• To sustain positive affective engagements even in the face of chronic difficulties

Resilience cuts across levels of adaptation: From restoration of homeostasis in the body to preservation of quality in community life.
Psychological Immunity

- A built-in response to troubling times that transforms our representations of negative events giving rise to resilient solutions (some good/some bad)

- People are frequently unaware of these capacities within themselves and in their social networks.

- *There is likely a Social Immunity as well*
ATTITUDE ADJUSTMENT

(Look Forward Not Backward)
FACTORS CONTRIBUTING TO GOOD HEALTH

- Genetics
- Environment
  - Air, water
- Psychosocial Factors
  - Resiliency vs. Depression
- Lifestyle
  - Weight, diet, smoking, exercise
- Aging
Diet/weight and its effect on healthy aging (and longevity)!

How important is diet?

What’s in and what’s out regarding dietary intake!
Obesity and Longevity

Non-obese persons live longer than obese persons.
Figure 2. Age-adjusted* prevalence of overweight and obesity among U.S. adults, age 20-74 years

*Age-adjusted by the direct method to the year 2000 U.S. Bureau of the Census estimates using the age groups 20-39, 40-59, and 60-74 years.
BMI and Mortality
All Women, 1976-92 (4726 Deaths)

Body-Mass Index = Weight in lbs × 704.5
               (Height in inches)^2

CHI for trend = 3.27  P = 0.001

Manson et al, 1995
DIET
WHAT SHOULD I BELIEVE
AND
WHAT SHOULD I NOT BELIEVE??
Today’s Random Medical News

According to a report released today...

Can cause:
- Hypothermia
- Schizophrenia
- Depression
- Sexual Dysfunction

In:
- Twinning
- Mice
- Two-income families
- Overweight smokers
- 7 out of 10 women
- Men 25-40

From the New England Journal of Panic-inducing Gobbledygook
Healthy Eating Pyramid (Walter Willett, MD)

“Eat, Drink, And be Healthy”
Walter C. Willett, MD
LOW FAT DIETS — IN or OUT?
New results from Woman’s Health Initiative Dietary Modification Trial showed that eating a low-fat diet for 8 years did not prevent heart disease, breast cancer, or colon cancer, and didn’t do much for weight loss, either.

Intake of total fat intake is not as important as the type of fats ingested in preventing adverse medical problems

SO WHICH FATS ARE IN AND WHICH FATS ARE OUT?
TRANS FATS – OUT!!
Dietary Fat Intake and the Risk for Coronary Artery Disease.*

**With a 2% increase in caloric intake from trans fatty acids there is an 23% increase in the incidence of coronary artery disease.**

*Hu et al. NEJM, 1997  ** Mozaffarian et al, NEJM, 2006*
## Effect of Trans and Saturated Fat (10% E) on Blood Lipids (vs Monounsaturated Fat) *(Mensink & Katan, 1990)*

<table>
<thead>
<tr>
<th></th>
<th>Trans fat</th>
<th>Saturated fat</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total cholesterol</td>
<td>+6%</td>
<td>+12%</td>
</tr>
<tr>
<td>LDL cholesterol</td>
<td>+14%</td>
<td>+18%</td>
</tr>
<tr>
<td>HDL - good cholesterol</td>
<td>-12%</td>
<td>0%</td>
</tr>
<tr>
<td>LDL/HDL ratio</td>
<td>+29%</td>
<td>+18%</td>
</tr>
</tbody>
</table>
## DIETARY FATS

<table>
<thead>
<tr>
<th>Type of Fat</th>
<th>Main Source</th>
<th>State at Room Temperature</th>
<th>Effect on Cholesterol Levels</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monounsaturated</td>
<td><em>Olives, olive oil, canola oil, peanut oil; cashews, almonds, peanuts, and most other nuts; avocados</em></td>
<td>Liquid</td>
<td>Lowers LDL; raises HDL</td>
</tr>
<tr>
<td>Polyunsaturated</td>
<td>Corn, soybean, safflower, and cottonseed oils; fish</td>
<td>Liquid</td>
<td>Lowers LDL; raises HDL</td>
</tr>
<tr>
<td>Saturated</td>
<td>Whole milk, butter, cheese, and ice cream; red meat; chocolate; coconuts, coconut milk, and coconut oil</td>
<td>Solid</td>
<td>Raises both LDL and HDL</td>
</tr>
<tr>
<td>Trans</td>
<td>Most margarines; vegetable shortening; partially hydrogenated vegetable oil; deep-fried chips; many fast foods; most commercial baked goods</td>
<td>Solid or semi-solid</td>
<td>Raises LDL; lowers HDL</td>
</tr>
</tbody>
</table>

*Virgin olive oil better than refined (richer in phenolic content)*
DEPENDS ON WHAT KIND OF CARBS

Slowly Digested Carbohydrate

Easily Digested Carbohydrate

High Glycemic

Low Glycemic

Willett, EDBH, 2001
**Low Glycemic Load**
High-fiber fruits and vegetables (not including potatoes); Bran cereals; Many legumes, including chick peas, kidney beans, black beans, lentils, pinto beans.

**Medium Glycemic Load**
Pearled barley; Brown rice; Oatmeal; Rice cakes; Whole grain breads; Whole-grain pasta; No-sugar added fruit juices.

**High Glycemic Load**
Baked potato; French fries; Refined cereal products; Sugar-sweetened beverages; 12 oz Jelly beans; refined sugar products e.g. candy bars; Couscous; White basmati rice; White-flour pasta.
Six Ideas for Low-Sugar Drinks

• **Infused water (spa water)**
  - flavored water free of sugar and artificial sweeteners

• **Tea** - Black or green, caffeinated or decaf, leaf or herbal, hot or cold, tea is an excellent choice for a calorie free beverage.
  - Adding a teaspoon of sugar or honey only adds about 15 calories to the cup.

• **Coffee** – Watch what you add.
Six Ideas for Low-Sugar Drinks

• Sparkling water with a splash of juice
  - Home made sparkling juice - 12 ounces of sparkling water and add an ounce or two of juice. For a flavor twist, add sliced citrus or fresh herbs.

• Fresh fruit coolers - Store-bought or cafe smoothies are marketed as "health" foods, but they are often loaded with sugar and high in calories – *Ingredients*: 1/2 cup of ice, 3/4 cup of sugar-free sparkling water, 1/3 cup of melon or berries, Chopped mint leaves or citrus slices (optional) - 18 calories

• Low sodium broth or miso - Low-sodium broth can give your body the fluid it needs, and can be a satisfying alternative to a sweet drink.
NUTS AND FISH IN!
Nut Consumption and Risk of Coronary Heart Disease—NHS, 1980-1994

(Hu et al, 1997)
FISH OILS
Omega-3 essential fatty acids
(eicosapentaenoic acid (EPA)/docosahexaenoic acid (DHA))

Associated with a decrease mortality in patients with CHD and a delay in the progression of Alzheimer’s Dementia

Fish – salmon
Omega-3 fatty acids tablets
(300/440 mg. tablets)
Flaxseed Oil
FIBER IN!

Decrease cardiovascular disease

? Decrease colon cancer
# Sources of Fiber

♥ 20 - 35 grams/day

<table>
<thead>
<tr>
<th>Soluble Fiber</th>
<th>Insoluble Fiber</th>
</tr>
</thead>
<tbody>
<tr>
<td>oatmeal</td>
<td>Whole grains, whole wheat breads</td>
</tr>
<tr>
<td>oatbran</td>
<td>barley</td>
</tr>
<tr>
<td>nuts and seeds</td>
<td>couscous</td>
</tr>
<tr>
<td>Legumes</td>
<td>brown rice</td>
</tr>
<tr>
<td>dried peas</td>
<td>bulgur (dry cracked wheat)</td>
</tr>
<tr>
<td>beans</td>
<td>whole-grain breakfast cereals</td>
</tr>
<tr>
<td>lentils</td>
<td>wheat bran</td>
</tr>
<tr>
<td>Apples (pulp)</td>
<td>seeds</td>
</tr>
<tr>
<td>Pears (pulp)</td>
<td>carrots</td>
</tr>
<tr>
<td>strawberries</td>
<td>cucumbers</td>
</tr>
<tr>
<td>blueberries</td>
<td>zucchini, celery, tomatoes</td>
</tr>
</tbody>
</table>
CALCIUM
MILK
IN OR OUT?
Cancers

Calcium Intake associated with a lower risk of total cancers, and cancers of the gastrointestinal tract, especially colorectal cancers

Possible downside in men:
Increase prostate cancer in men drinking 3 glasses of milk/day
VITAMINS

WHAT’S IN
AND
WHAT’S OUT??
VITAMINS

WHAT’S IN -
Vitamin D and the B Vitamins,
Especially FOLIC ACID

WHAT’S OUT –
VITAMIN A, E AND ? VITAMIN C
Vitamin D

Take along with calcium for osteoporosis

♥ Improves muscle strength and balance
♥ Decreases incidence of colon cancer
♥ May help to maintain memory

Daily requirements 1000IU/day or 50,000/week
FOLIC ACID

♥ Observational studies show a decrease in cardiovascular disease
♥ Decrease incidence of colon cancer
♥ Delays the onset or slows the progression of Alzheimer’s Dementia

Daily requirements are NOT being met in older adults. We all should probably be taking a supplement!!
ANTIOXIDANTS

1. Berries – blackberries, strawberries, and raspberries
2. Nuts – walnuts
3. Vegetables – leafy green vegetables
   - Broccoli – 2 cups/day – helps allergies
GREEN TEA
(Polyphenols)

Green tea consumption associated with:
Reduced all cause mortality and cardiovascular disease but not cancer.
(Study out of Japan)

JAMA September 13, 2006
Probiotics (yogurt)

Beneficial in:
- Nutrition – Calories/Calcium
- Antibiotic induced diarrhea
- Constipation
- Irritable Bowel Syndrome
- Cancer (colon) prevention and treatment
- Immune enhancement
- Treat lactose intolerance
- Allergies

Peter Holt – AGS Conference May 2008
ALCOHOL

RESVERATRAL !?!
ALCOHOL

In the U.S., one drink is usually considered to be:
12 ounces of beer, 5 ounces of wine, or 1½ ounces of spirits (hard liquor such as gin or whiskey).
Each delivers about 12 to 14 grams of alcohol.

17% lower risk of all-cause mortality;
40% reduction in risk of CHD
Risk ratio for MI with intake of 15 – 29 grams of alcohol/day is 0.38 compared to no ETOH*
70% reduction in risk of ischemic stroke
BUT
20% - 25% increase in breast cancer in woman

*Archives Int. Med Oct. 23, 2006
I decided to take an aerobics class. I bent, twisted, gyrated and jumped up and down for an hour. But, by the time I got my leotard on, the class was over.
Jenny Wood-Allen from Scotland, was 87 years old when she completed the 1999 London Marathon.
EXERCISE

Some things you really can do forever!
The benefits of mild to moderate exercise are just as good as strenuous exercise!!

- Exercise 3-5 times/weekly
- Accumulative - need not be all at once
- Endurance, strength (passive resistance), flexibility, and balance
- Important to maintain or improve lean body muscle mass

ASO – Az. Senior Olympics (30 – 40 events)
HEALTHY LIFE STYLE

1. Non smoker
2. BMI < 25 kg/m²
3. Exercise ≥ ½ hr of brisk walking/day
4. Good diet (upper 2 quartiles of score based on low trans fat, high p/s ratio, low glycemic load (high – potatoes, white bread, & candies; low – vegetables, nuts, & grains), high cereal fiber, high fish, high total folate)
5. Alcohol 5+g/day (1 drink every other day) (largest study showing greatest association with increased longevity is with one alcoholic drink/day.)*

HUMOR!

Mom, Dad

Just do it
Just did it

Senior Sex Study
LIFE IS NOT A JOURNEY TO THE GRAVE WITH THE INTENTION OF ARRIVING SAFELY IN A PRETTY AND WELL PRESERVED BODY, BUT RATHER TO SKID IN BROADSIDE, THOROUGHLY USED UP, TOTALLY WORN OUT, AND LOUDLY PROCLAIMING

WOW.....WHAT A RIDE!