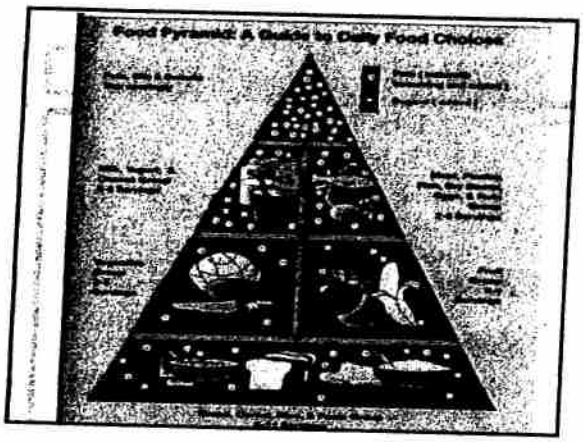
EATING FOR HEALTH

- HEALTHY FOOD CHOICES
- MAINTAIN BODILY FUNCTION
- IMMUNITY AND PREVENTION

THE NUTRIENTS

- WATER...A CRUCIAL ELEMENT
- PROTEINS...BODILY FUNCTIONS
- CARBOHYDRATES...ENERGY
- FATS...INSULATION, ENERGY
- VITAMINS...ORGANIC
- MINERALS...INORGANIC

AMERICAN DIET



PROTEINS

- DEVELOP & REPAIR
  - BONE, MUSCLE, SKIN AND BLOOD CELLS
- ELEMENTS OF ANTIBODIES
- ENZYME & HORMONE FUNCTION
- TRANSPORT IRON, OXYGEN, & NUTRIENTS
- NOT A GOOD SOURCE OF ENERGY
  - 4 CALORIES PER GRAM

PROTEIN COMPOSITION

- AMINO ACIDS
  - BUILDING BLOCKS OF PROTEIN
  - 20 COMMON AMINO ACIDS
    - » 9 OF THESE ARE ESSENTIAL
    - » 11 OF THESE CAN BE PRODUCED IN BODY
- "COMPLETE" PROTEIN: 9 AMINO ACIDS
- "INCOMPLETE": NOT ALL 9 AMINO ACIDS

PROTEIN CONSUMPTION

- RECOMMENDED
  - 4-6 OUNCES
  - 40-60 GRAMS
  - 12 % OF DIET
- MORE FROM PLANT FOODS
  - LEGUMES, NUTS, GRAINS
- 4 CALORIES PER GRAM
- AVERAGE
  - 9 OUNCES
  - 90+ GRAMS
  - 15-20% OF DIET
- 70% FROM ANIMAL PRODUCTS
  - MEAT, POUTRY, CHEESE, EGGS
- EXCESS STORED AS FAT!

CARBOHYDRATES

- PROVIDES ENERGY
  - 4 CALORIES PER GRAM
- ELIMINATION
- FAT METABOLISM
- PROTEIN FUNCTION

SIMPLE CARBOHYDRATES

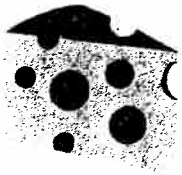
- MONOSACCHARIDES "SIMPLE SUGARS"
  - GLUCOSE, FRUCTOSE
- DISSACHARIDES "DOUBLE SUGARS"
  - SUCROSE, LACTOSE, MALTOSE
- POLYSACCHARIDES
  - STARCHES, DEXTRINS, GLYCOGEN, CELLULOSE, FIBER

FIBER

- MOVES FOODS THROUGH SYSTEM
  - SOFTENS STOOLS BY ABSORBING WATER
- INSOLUBLE
  - BRAN, WHOLE-GRAIN BREADS, FRUITS & VEGETABLES
  - MAY REDUCE CANCER
- SOLUBLE
  - OAT BRAN, DRIED BEANS, FRUITS AND VEGETABLES
  - LOWERS BLOOD CHOLESTEROL
- NEED 25 GRAMS (MOST GET LESS THAN 10)

FATS....(LIPIDS)

- ENERGY - 9 CALORIES PER GRAM
- PROTECTION & INSULATION
- PROVIDES ESSENTIAL FATTY ACIDS
- CARRIES FAT-SOLUBLE VITAMINS (A,D,E,K)
- TYPES OF FAT
  - SATURATED
  - UNSATURATED
  - HYDROGENATED
  - CHOLESTEROL



TYPES OF FAT

- SATURATED FAT
  - SOLID AT ROOM TEMPERATURE
  - ANIMAL SOURCES, COCCONUT & PALM OILS
- UNSATURATED FATS UNSATURATED
  - PLANT SOURCES
  - LIQUID AT ROOM TEMERATURE
  - MONOUNSATURATED: OLIVE & CANOLA OIL
  - POLYUNSATURATED: FISH, CORN, SOYBEAN
- TRANS FATTY ACIDS
  - PLANT OILS HYDROGENATED
  - SOLID AT ROOM TEMPERATURE

CHOLESTEROL

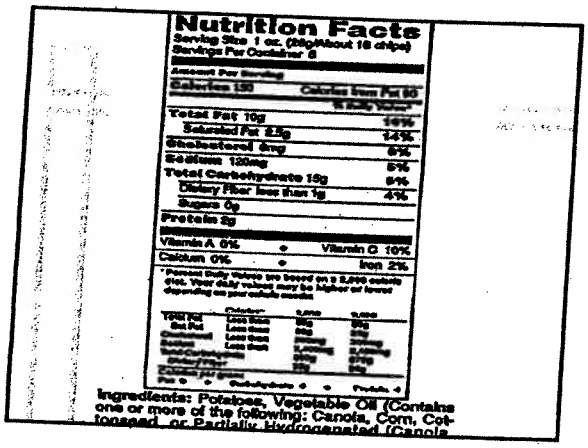
- DIETARY CHOLESTEROL IS IN FOOD
- BODY PRODUCES SERUM CHOLESTEROL
  - » DIGESTION , FAT ABSORPTION, HORMONES, MEMBRANCE & OTHER
- GENETICS
- SATURATED & TRANS FATTY ACIDS INTAKE
- YOUR CHOLESTEROL READING?
  - » HIGH DENSITY LIPOPROTEIN - HDL
  - » LOW DENSITY LIPOPROTEIN - LDL

VITAMINS AND MINERALS

- VITAMINS: ORGANIC SUBSTANCES
  - PLANTS AND ANIMALS
  - PROMOTE CHEMICAL REACTIONS WITHIN CELLS
  - RELEASE ENERGY, GROWTH, REGULATE FUNCTIONS
  - 4 FAT SOLUBLE: ADEK - STORED IN LIVER
  - 9 WATER SOLUBLE: B COMPLEX & C
- MINERALS: INORGANIC SUBSTANCES
  - MACROMINERALS: 7 - CALCIUM, ETC.
    - » FLUID BALANCE IN CELLS, GROWTH, BONE, TEETH
  - MICROMINERALS: 14 MINERALS- IRON, ZINC,
    - » HELP THE BODY HANDLE OXYGEN

WATER

- 50% TO 60% OF TOTAL BODY WEIGHT
- FUNCTIONS
  - BATHES, LUBRICANTS & CUSHIONS CELLS
  - FLUID, pH, & ELECTROLYTE BALANCE
  - TRANSPORTS FLUID & OTHER SUBSTANCES
  - MAINTAIN BODY TEMPERATURES
- DEHYDRATION
  - THIRST IS FIRST SIGN
    - » FATIGUE, WEAKNESS, ILLNESS, DEATH
  - THIRST NOT ADEQUATE DURING EXERCISE
  - DIRUETICS LIKE CAFFEINE & ALCOHOL



HOW TO FIGURE FAT INTAKE FROM A FOOD LABEL

FAT CALORIES / TOTAL CALORIES

GRAMS OF FAT x 9 = FAT CALORIES

EXAMPLE:

1 TBSP OF PEANUT BUTTER

8 GRAMS OF FAT AND 95 CALORIES

8 X 9 = 72 2. DIV. BY 95 = 76% CAL'S FROM FAT

20-30% OF YOUR CALORIES FROM FAT

RECOMMENDED DAILY REQUIREMENTS - RDA

- DAILY NUTRIENTS
- FLEXIBLE GUIDELINES
- 17 POPULATION GROUPS
  - VARY AS TO AGE, GENDER, HEALTH,
- AVERAGE NUTRITION
- SAFETY MARGIN OF 1/3
- FOOD LABEL-TYPICAL MALE

FOOD AND DRUG ADMINISTRATION

NAT'L RESEARCH COUNCIL & NAT'L ACADEMY OF SCIENCES

DIETARY GUIDELINES FOR AMERICANS

- EAT VARIETY OF FOODS
- HEALTHY WEIGHT
- CHOOSE LOW FAT & CHOLESTEROL
- CHOOSE PLENTY OF FRUITS, VEGETABLES & GRAINS
- USE SUGARS IN MODERATION
- USE SALT AND SODIUM IN MODERATION