



PRINCESS
Durru Shehvar
CHILDREN'S & GENERAL HOSPITAL



EXERCISE & FITNESS



OVER VIEW

- Benefits of Exercise**
- Components of Exercise**
- Fit Formula**
- Fitness Tests**
- Human Ergonomics**
- Exercise Therapy**

BENEFITS OF EXERCISE

- Muscular Debility
- Osteoporosis
- Joint Problems
- Anxiety / Depression
- Stress
- Psychosomatic
- Obesity
- Respiration

- H.B.P.
- Heart Rate
- Cholesterol
- Diabetes

QUALITY OF LIFE

LENGTH OF LIFE

COMPONENTS OF A FITNESS PROGRAM

- **Activity**
- **Stamina**
- **Strength**
- **Flexibility**
- **Skill**

STAMINA

**Activity : Daily
Weekly
Annual**

**For Cardiac benefit = 1200 Cals / Day
that is 4 hours moderate activity**

**Stamina :
Aerobic : Walking, Jogging, Cycling
Swimming etc.**

Anaerobic: Games.

**Training Heart Zone
 $220 - \text{age} - 30 = \text{Max. THZ}$
 $- 30 = \text{Min. THZ}$
Deep Breathing.**

STRENGTH

-Types of Exercise

-Isometric

-Calisthenics

-Gym Exercises



-Muscle Groups

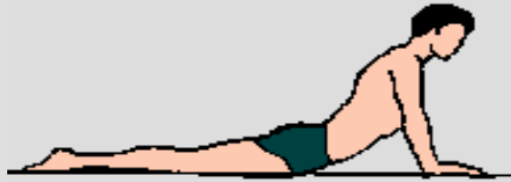
-Arms, Shoulders

-Chest

-Abdomen

-Thigh, Calf

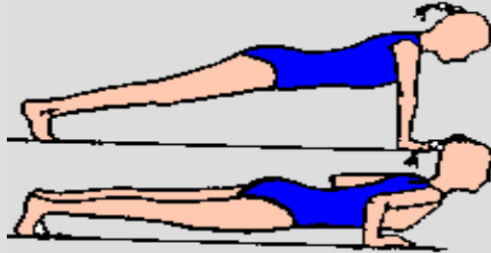
STRENGTH EXERCISES CALISTHENICS



MODIFIED PUSH - UP



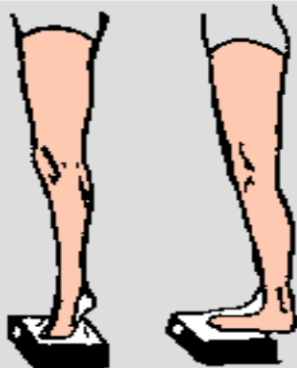
MODIFIED SIT - UP



**PUSH-UPS FOR
SHOULDERS
CHEST, ARMS**



**SITUPS FOR
ABDOMINAL
MUSCHLES**



CALF RAISES



SQUATS FOR THIGHS

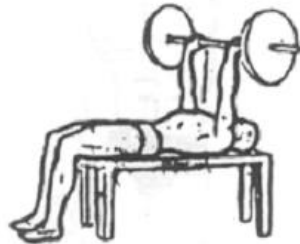


**BACK LIFT FOR
STRENGTHENING
BACK**

STRENGTH EXERCISES / WEIGHT TRAINING



SHOULDER PRESS



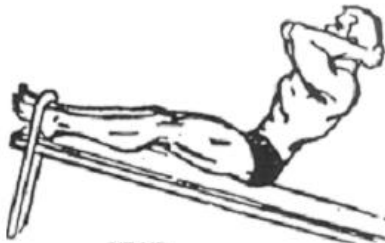
BENCH PRESS



CURL



CALF RAISE



SIT UP



BACK HYPER
EXTENSION



HALF SQUATH

STRENGTH EXERCISES / WEIGHT TRAINING



ALTERNATE
DUMBBELL CURL



SIDE BENDS



LEG RAISES



TRICEP STRETCH



LEG PRESS



LEG CURL



LEG EXTENSION



CALF RAISE

GYM EXERCISES ROUTINE

Conventional
Circuit System
Split System
Supersets
Progressive



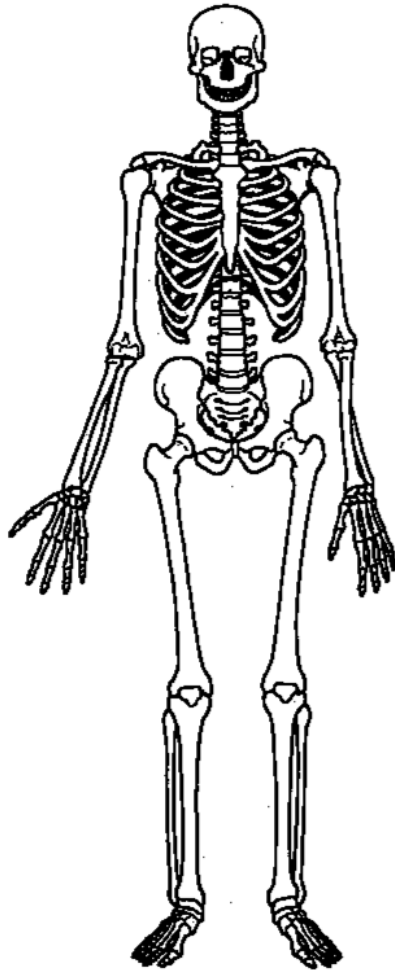
Formula

6/8 reps. In upper body

15/25 reps. In lower body

3 sets of each exercise

FLEXIBILITY & MOBILITY EXERCISES



- **Yogasanas**
- **Joint Mobility**
 - **Neck**
 - **Shoulders**
 - **Elbows**
 - **Wrist**
 - **Fingers**
 - **Waist Rotation**
 - **Hip**
 - **Knee**
 - **Ankle & Foot**

FLEXIBILITY & MOBILITY EXERCISES



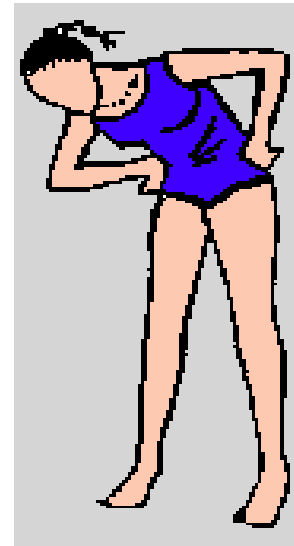
NECK ROTATION



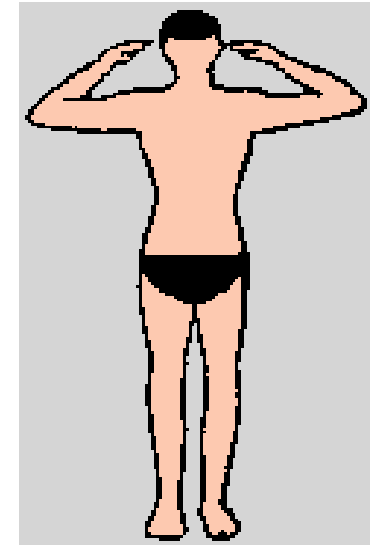
WRIST ROTATION



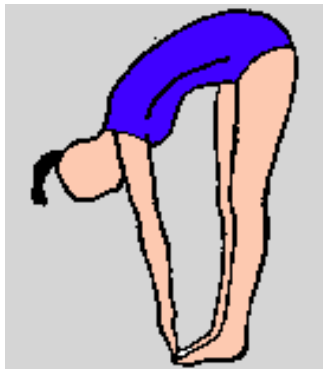
SHOULDER ROTATION



WAIST ROTATION

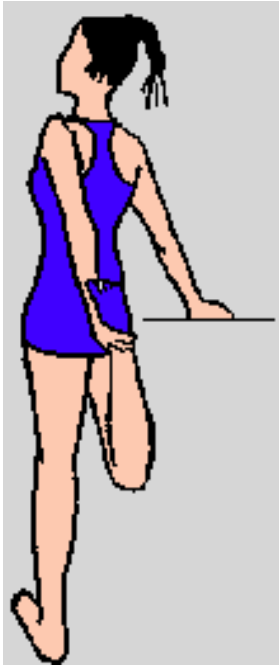


ELBOW BENDS



TOE TOUCH

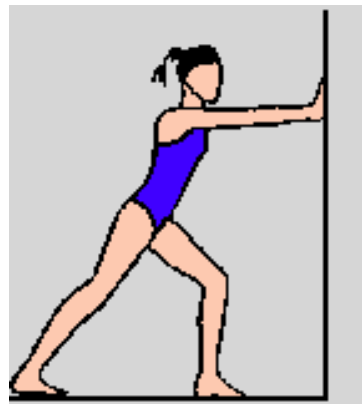
FLEXIBILITY & MOBILITY EXERCISES



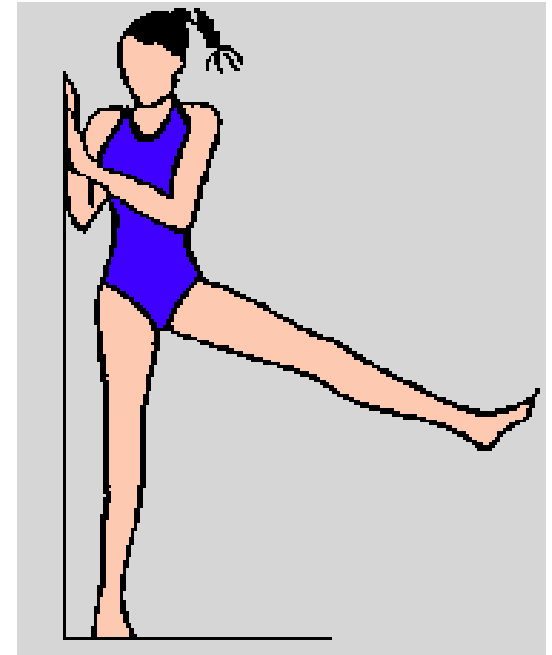
FRONT THIGH STRETCH



ANKLE ROTATION

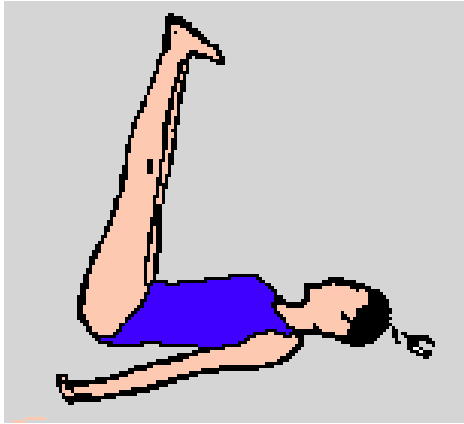


CALF STRETCH

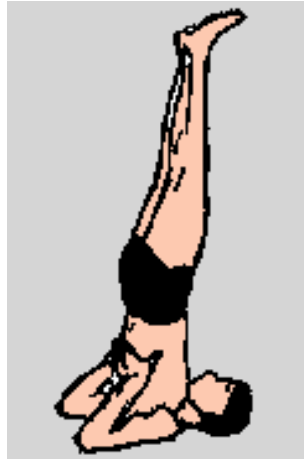


HIP MOBILITY

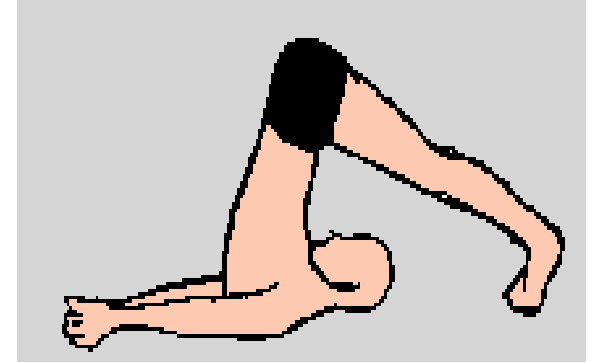
YOGASANAS



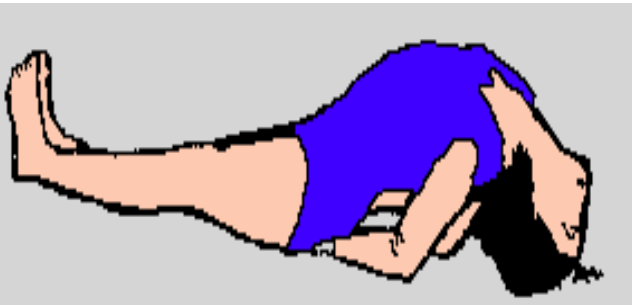
ARDHALASANA



SARBANGASANA



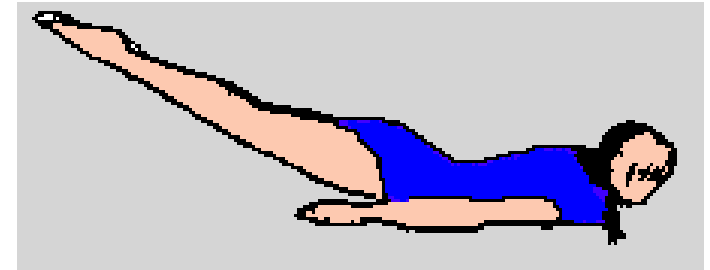
HALASANA



MATSYASANA



BHUJANGASANA

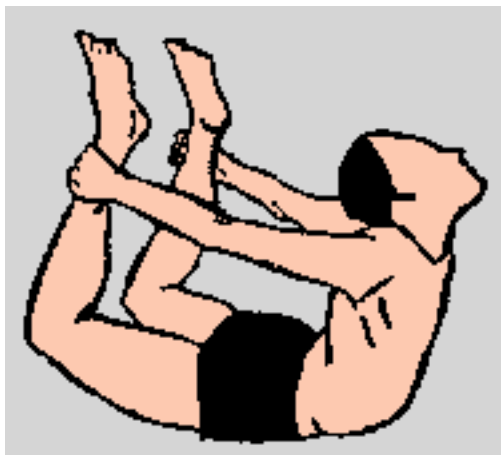


SALABHASANA

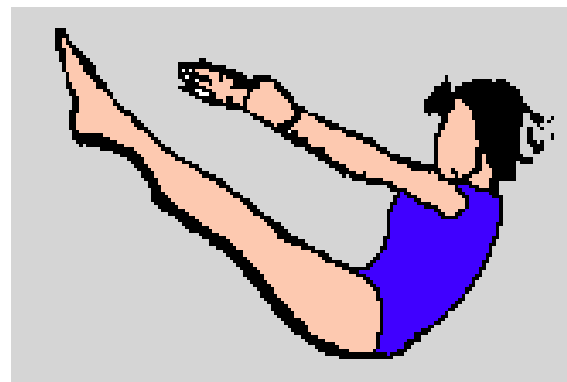
YOGASANAS

- Ardh-Halāsana** - **Abdomen, Legs, Back, Reproduction**
- Sarbangāsana** - **Brain, Nervous System, Thyroid, Circulation**
- Halāsana** - **Spine, Nervous System, Lungs.**
- Matsyasana** - **Chest, Thyroid, Lungs**
- Bhujangāsana** - **Back, Reproduction, Chest, Abdomen.**
- Salabhasana** - **Back, Gas, Digestion, Reproduction.**

YOGASANAS



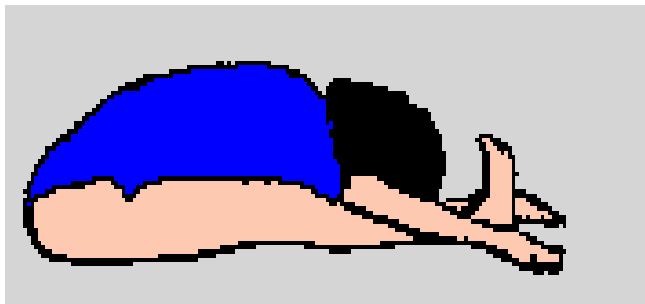
DHANURASANA



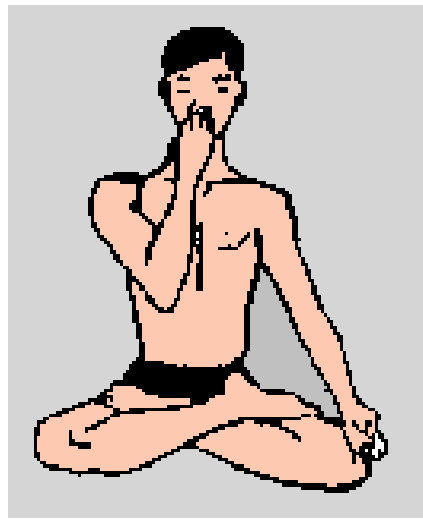
NAUKASANA



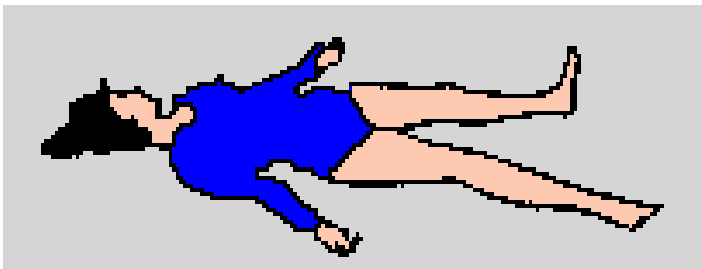
BAKRASANA



PASCHAMATTASANA



ANULOM / VILOM



SHAVASANA

YOGASANAS

Dhanurasana

- **Spine, Abdomen, Chest.**

Naukasana

- **Abdomen, Digestion, Legs, Back.**

Bakrasana

- **Spine, Waist, Gas, Digestion.**

Padhastasana

- **Spine, Abdomen, Gas, Digestion.**

Pranayama

- **Heart, Lungs, Circulation, Nerves.**

Shavasan

- **Relaxation.**

SKILL & SPORTS

Olympic sports

Non Olympic sports

Recreational

Competitive

-Racquet Games

-Ball Games

-Water Games

-Martial Arts etc.

FITT

- 1. Frequency :- (A) Fitness - 3 days/Week. Stamina, Strength, Flexibility.
(B) Cardiac - Obesity - 6 Days/Week.
(6) Stamina (3) Strength (3) Flexibility.**
- 2. Intensity :- Repetition & Sets
(10 x 3) as per age.**
- 3. Time :- 30 - 60 Minutes/Day (AM/PM)**
- 4. Type :- Morning.
Afternoon.
Evening.**

5 Minute Exercise

PHYSICAL FITNESS TESTING

AAPHERD TESTS

For children

Body Fat

Sit & Reach

Pull up / Sit up

Standing Long Jump

50 ys. Sprint

9/12 Mins. run

5 STAR TESTS

For adults

Ht. / Wt. Ratio

Sit ups

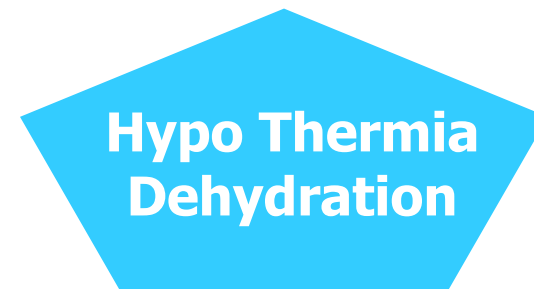
Toe Touch

100 m. run

12 min. run / walk

SAFETY SUGGESTIONS

1. Medical Clearance
2. Start Gradually
3. Moderation
4. Warm up / Cool Down



- | | | |
|-------------|---|--------------------------------|
| Stamina | - | T.H.Z. |
| | - | Impact (Jogging - Aerobics) |
| Strength | - | Free Wts / Gym Machines. |
| Flexibility | - | Yogasananas (Expert Guidance) |
| | - | Calisthenics (Gentle Movement) |

- | | | |
|------------------|---|-------------------|
| TOE TOUCH | - | HAMSTRING STRETCH |
| FULL SQUAT | - | HALF SQUAT |
| DOUBLE LEG RAISE | - | ALT. KNEE TUCKS |
| SIT UP | - | CRUNCH |
| NECK ROTATION | - | SIDE TO SIDE |
| SIDE BEND | - | TWIST ETC. |

EXERCISE

MODERATION

V/S

INTENSITY

For Enjoyment
Improves Health
Easy to Do/Continue
Reduces More Body Fat
Burns Fat as Fuel
Decreases Hunger
Stimulates Immune
Improves Mood
Retards Aging

For Competition
Improves Fitness
Hard To Do/Continue
Reduces Less Body Fat
Burns Sugar As Fuel
Increases Hunger
Weakens Immune System
Increases Anxiety
Accelerates Aging

SPORTS INJURIES

Muscle Soreness

Muscle Cramps

Stitch

Pulled Muscle

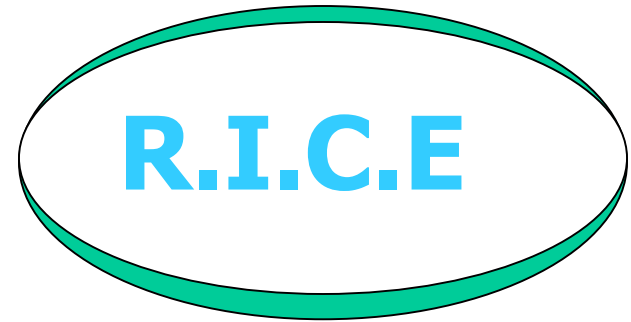
Sprain

Achilles Tendonitis

Shin Splints

Knee, Shoulder, Elbow, Back injuries

Contusions



HUMAN ERGONOMICS

Physical

Exercise

- Stamina
- Strength
- Flexibility
- Eye exercises

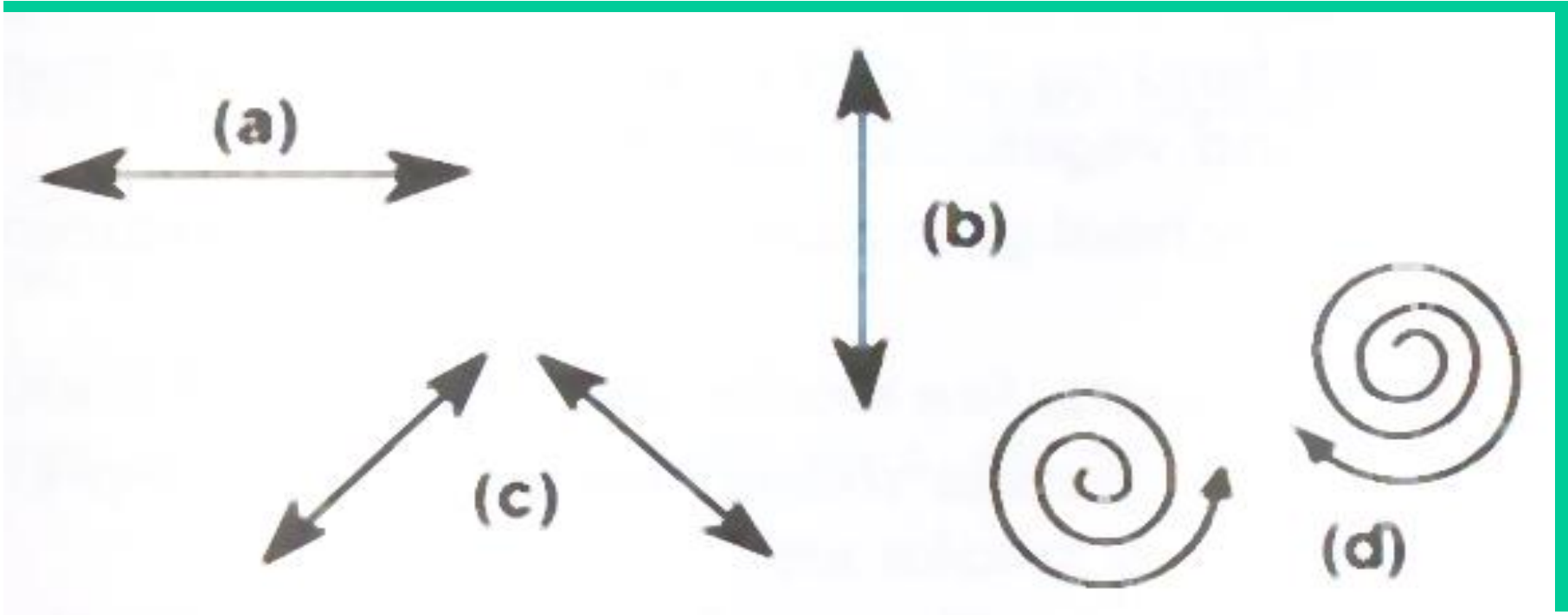
Posture

- Standing
- Sitting
- Lifting
- Sleeping

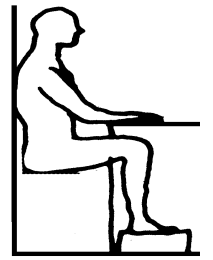
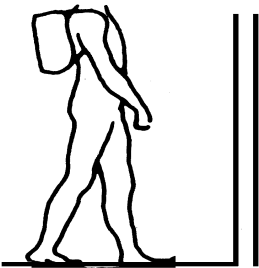
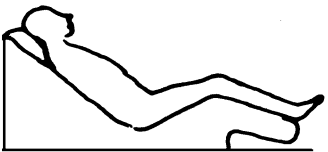
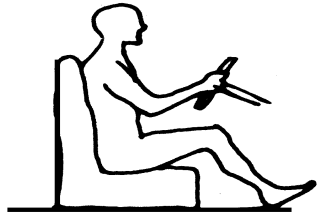
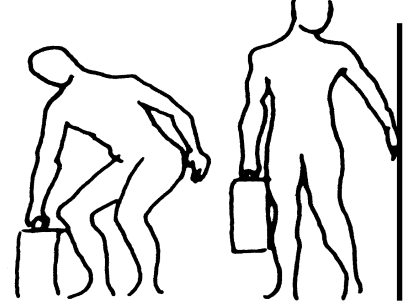
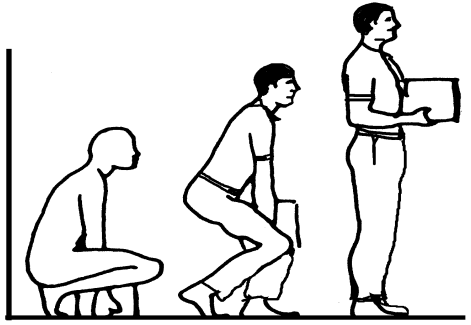
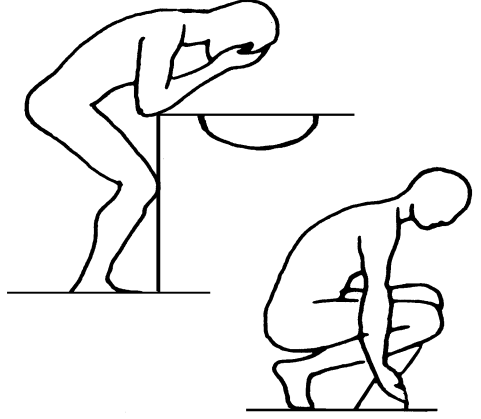
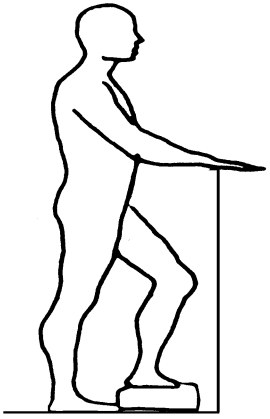
Routine

- Movement
- PEP

EYE EXERCISES



POSTURE



THEREPEUTIC EXERCISES

- **Cardiac**
- **Neuro**
- **Joints**
- **Geriatric**
- **Pregnancy**
- **Obesity & Children**



CARDIAC RISK FACTORS & THE EFFECTS OF EXERCISE

RISK	EFFECT
<p>High Heart Rate</p> <p>High Blood Pressure</p> <p>High Blood Sugar</p> <p>High Cholesterol</p> <p>Obesity</p> <p>High Stress Levels</p> <p>Smoking</p> <p>Hereditary</p>	<p>Reduces Heart Rate</p> <p>Reduces Blood Pressure</p> <p>Utilizes Sugar Energy</p> <p>Utilization of Fat & Increase of HDL</p> <p>Utilization of Calories</p> <p>Utilizes Stress Hormones</p> <p>Purification of Lungs/Blood</p> <p>Change of Profile</p>



Thank You

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