# S.M.ART Life

DR KUNAL KOTHARI BUTE HOUSE MEDICAL CENTRE

HATTERS HEALTH NETWORK













Regular attendance at these sessions might make you feel better than you have ever felt!



Symptoms could be feeling lighter, happier, less tired & more energetic.



It can also be expensive as you might need to buy new clothes.

## Journey so far...

#### Triumphs



#### Challenges





## Body structure

### Science of movement

### Best exercise

## **Body structure**

650 muscles

360 joints

206 bones

900 ligaments



## Lean Body Mass

- Weight of your body minus fat.
- Bones, muscles, organs, skin & water.
- Aim is to improve lean body mass & reduce fat mass.

## Smart body



 Try to keep building blocks for body – proteins in balance state as much as possible

## Scenario I

- If protein intake not enough – It will keep you hungry and try to reach daily requirements by making you eat a lot.
- You end up eating lots of carb and fat in the process





- Body doesn't increase uptake but tries to be as conservative in using protein as possible
- Hair loss & brittle nails
- Immunodeficiency -recurrent illness
- Weak muscles tiredness
- Weak bones increased fracture risk



## Vegetarian sources of protein

- Tofu
- Yogurt
- Lentils
- Pulses
- Paneer
- Cheese
- Seeds & Nuts

- Eggs
- Whey Protein

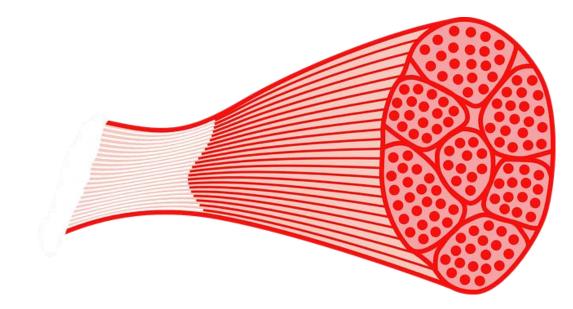
# Will I be healthy if I increase my protein intake?

• Yes from satiety point of view but over the medium to long term you need to tell your body what to do with increased protein.



## Muscle Matters

- Muscle utilises 90% of energy when we exercise.
- 80% of the energy from any meal goes to muscles.



## Muscles

- Use it or lose it!
- Very important organ
- Can burn extra energy full of mitochondria
- Improves bone strength (reduces risk of osteoporosis – particularly important for women above 45 years)





- Poverty of flesh/strength
- Loss of muscle mass with growing age

• We lose approximately 1% of our muscle mass every year after age 40

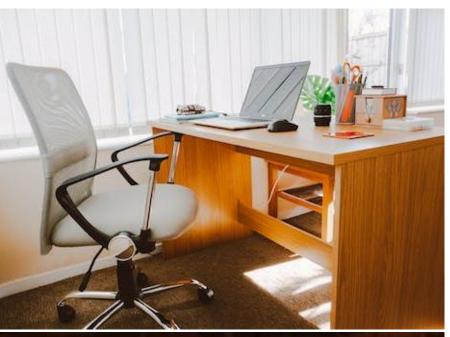


• Half of the population in developed world is not active enough.

## Physical Inactivity



Activity: K2SMARTLIFE Dr Kunal Kothari







## Activity

Sitting is dangerous

Health risk even higher as compared to obesity

Increased risk of type 2 diabetes, heart attacks & stroke





## **Exercise** Myths



Activity: K2SMARTLIFE Dr Kunal Kothari

## When to do exercise?

• Couch potato

• Active couch potato

## **Movement V's Exercise**

- Optimum Strain to body without stress
- Goldilocks rule



## **Benefits of Movement**

- Endorphins Pain & Stress fighter
- IL6 Increase immunity
- Bone modulation
- Enhance brain function
- Longevity



## What is the best exercise?

# Best exercise is the one which you will do!

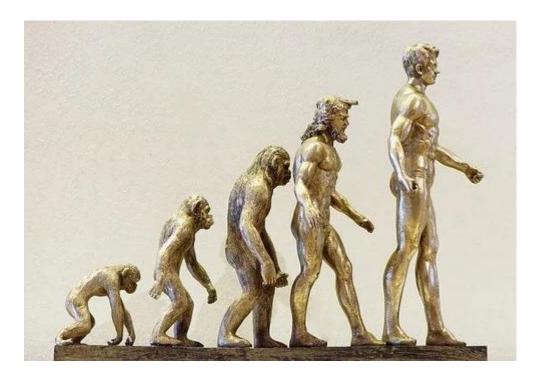
## **Activities**

- Walking
- HIIT
- Strength Training
- Relaxation exercises



## Walking

- One of the major difference between human and all the other animals
- Evolution Advantage
- Walking defines us as human
- Best body-mind feedback mechanism



## Walking

- Reduces risk of dementia
- Reduces risk of cancer
- Reduces risk of heart attacks & strokes
- Reduces risk of type2 diabetes



## **Reverse Insulin Resistance**

 You can reduce glucose spike by walking for 10 to 20 minutes within an hour of eating a meal.



## **Purpose** of walking

- Pleasure
- Essential
- Creative need

- Group walking
- Mindful walking
- Problem solving walking

## **Daily Step Counts**

- Minimum 6000
- Good 8000
- Very good 10000
- Excellent 12000



## Strength Training





## **Strength Training**

- More the muscle more space to put excess sugar and more mitochondria to burn energy
- Reduces inflammation
- Reduces risk of sarcopenia – age related loss of muscle

- Improves insulin sensitivity
- Improves hormonal balance
- Reverses ageing
- Reduces risk of osteoporosis
- Sharpens thinking

## Strength Training

- Push ups
- Planks
- Lunges





 https://www.youtube.co m/watch?v=2GgKm\_54kX



# HIT

- Set number of a high intensity exercises, each immediately followed by period of recovery
- 15 seconds to 60 seconds with 15 to 30 seconds recovery time.
- Total 5 to 15 minutes



## HIT – High Intensity Interval Training

- We survived by choosing path of least resistance.
- Working in intervals of varying intensities is natural to our normal behaviour.
- Harder the intensity more heat is produced = energy used = weight loss



## HIT

- Reduces visceral fat
- Weight loss
- Improves insulin sensitivity
- Increases mitochondria function
- Releases BDNF improves
  memory

- Brisk walking/running in short bursts
- Star jumps
- Marching
- Squats

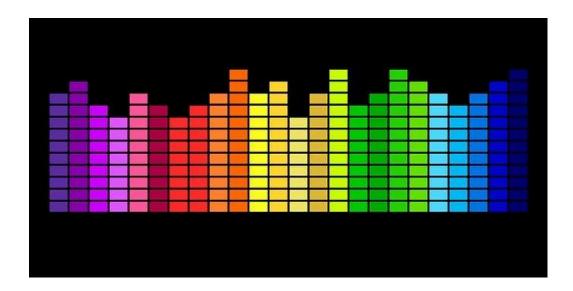
## **Relaxation Exercises**

- Breathing Techniques
- Yoga
- Tai-Chi
- Pilates



## Frequency

- Steps Daily
- Walking 30 minutes brisk walking 5 times a week
- HIIT 15 to 30 min 2 to 4 times a week
- Strength Training 15 to 30 min 2 to 4 times a week



# Top Tips

- Alternate difficult days with easier days to ensure recovery and re-charge.
- Increase protein & exercise in tandem.
- Intensity goal is personal & not comparing to anyone else



## Home work

- Standing desk
- Movement snack
- Conscious Breathing



## **Thank You & Feedback**

