



Exercise

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[Introduction]

- Why is exercise important?
- What happens when I exercise?
- What is exercise?
- What sort of exercise is best?
- How hard should I be working?
- What about safe exercising?



What is Exercise?

- **An activity that requires physical exertion, especially if performed to develop or maintain fitness**

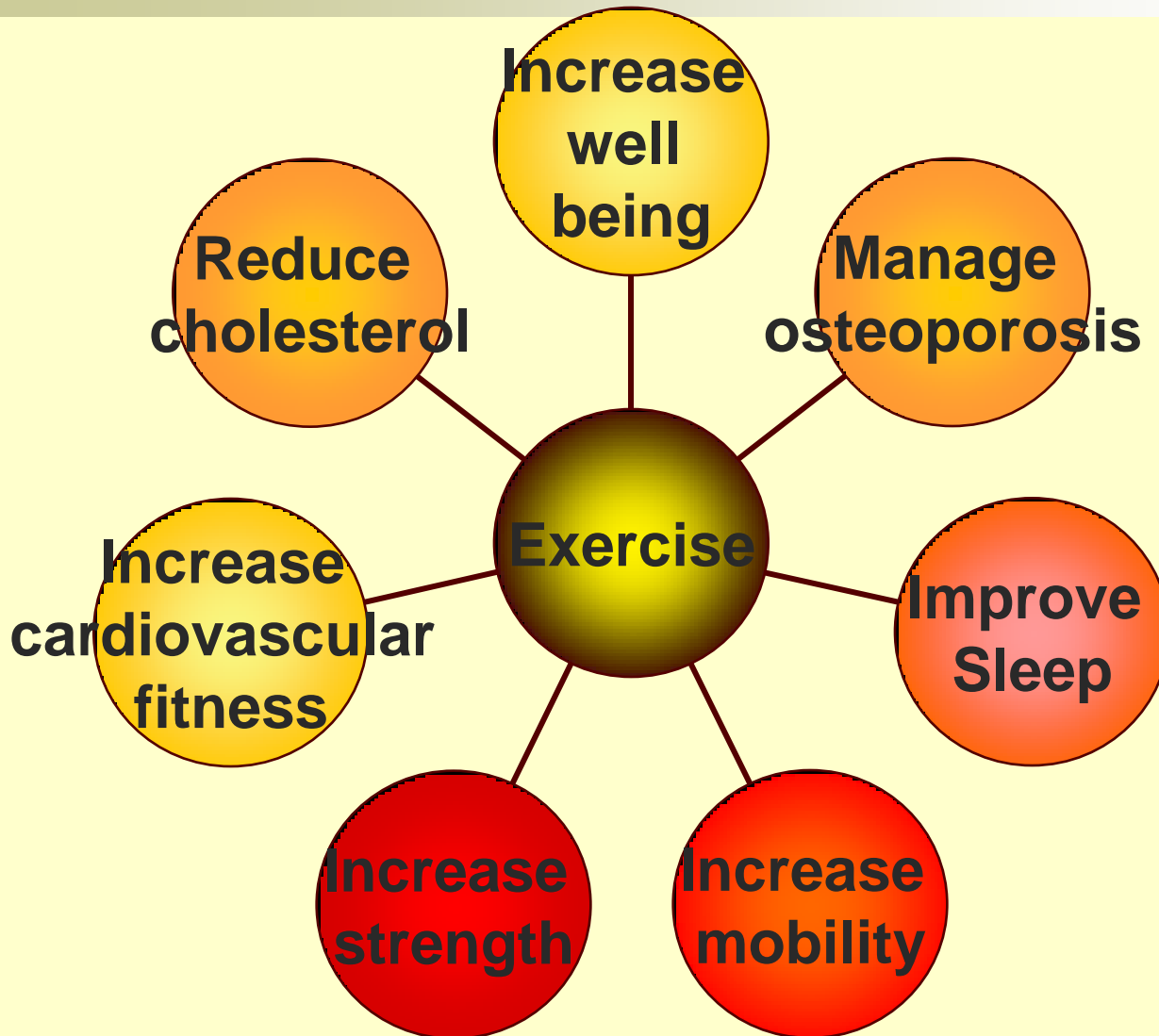


[What is Exercise?]

- A manual activity that develops or maintains physical fitness and overall health.



Benefits of Exercise



[Why is Exercise Important]

- Increase energy levels
- Increase self esteem and confidence
- Improve fitness, mobility and strength
- Reduces the chances of type 2 diabetes
- Keeps weight under control
- Strengthens the immune system

What Happens During Exercise

- Body prepares for exercise
- Muscles demand more oxygen
- Start to breath more deeply
- Start to breath more rapidly
- Heart rate starts to increase
- Blood flow is redistributed
- Systolic blood pressure starts to increase

How Does the Body Adapt When You Exercise

- Reduced heart rate
- More efficient heart
- Reduced blood pressure
- Increased blood flow to the heart muscle



[Exercise Types]

- ✓ Exercise that promotes heart and lung fitness
- ✓ Exercise that promotes flexibility
- × Exercise that targets muscle strength

[Select Wisely]

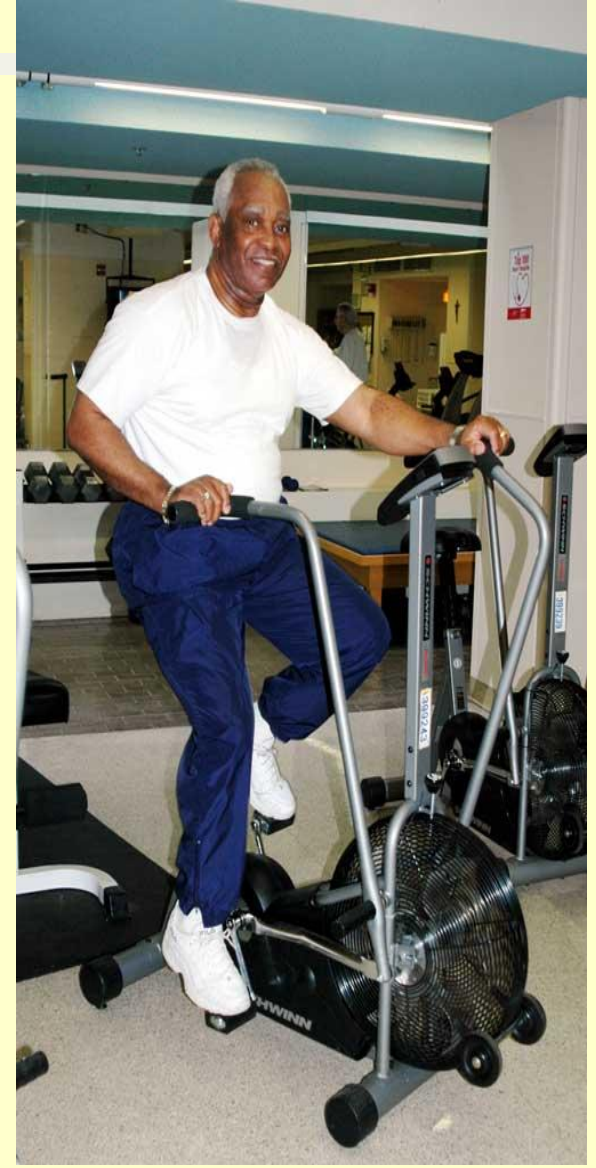
- Avoid contact sports
- Swimming unaccompanied
- Heavy lifting / static weights
- Think safety

[What Type Of Exercise?]

- Rhythmic activity which makes you moderately short of breath
- Uses large muscle groups



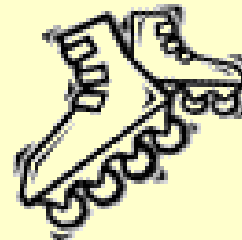
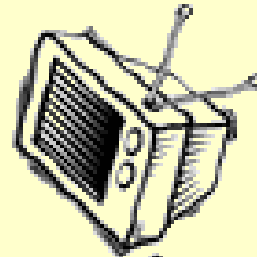




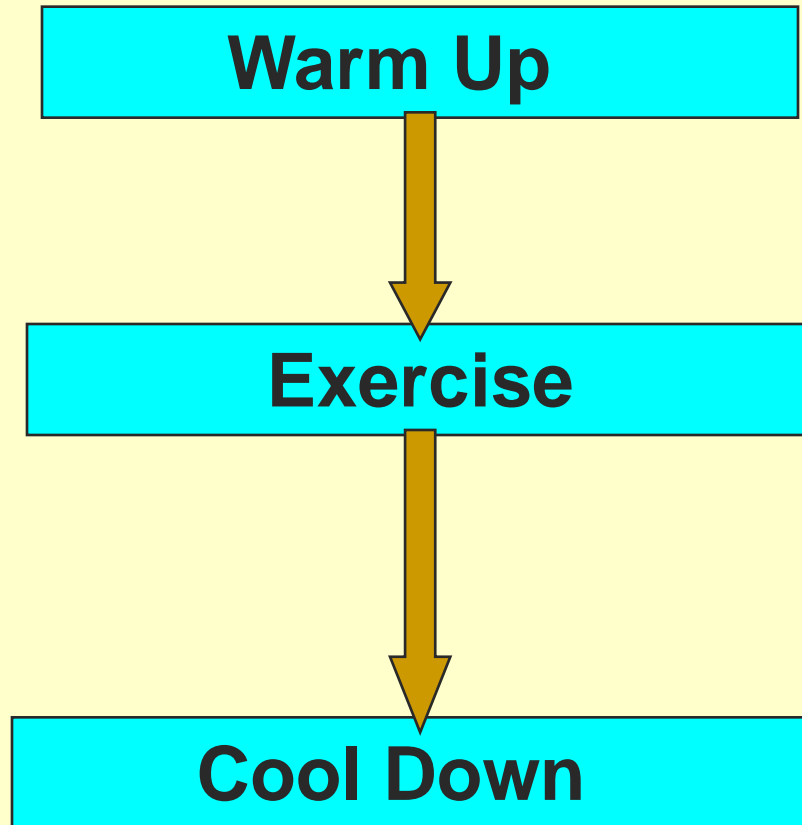
Rating of Perceived Exertion

RPE SCALE

- 0 nothing at all
- 0.5 very, very weak
- 1 very weak
- 2 weak
- 3 moderate
- 4 somewhat strong
- 5 strong
- 6
- 7 very strong
- 8
- 9
- 10 very, very strong
Maximal



Stages of Sensible Exercising



- 15 minutes
 - Pulse raising
 - Gentle stretching
- 15-30 minutes
 - RPE 3-4
 - Intermittent training
- 10 minutes
 - Gradual decrease in heart rate
 - RPE less than 3

[How Much]

- Progress slowly initially
- Aim for 60-75% target heart rate (220-age)
- Or use RPE scale
- Take care if on beta blockers

How Should I Feel When Exercising?

- Slightly warm
- A little sweaty
- Slightly breathless
- May be aware of heart beating
- An awareness of exertion

[Activity Guidelines]

- A moderate amount of exercise more often rather than small amounts of intense exercise

[How Often]

**Move something
every day**

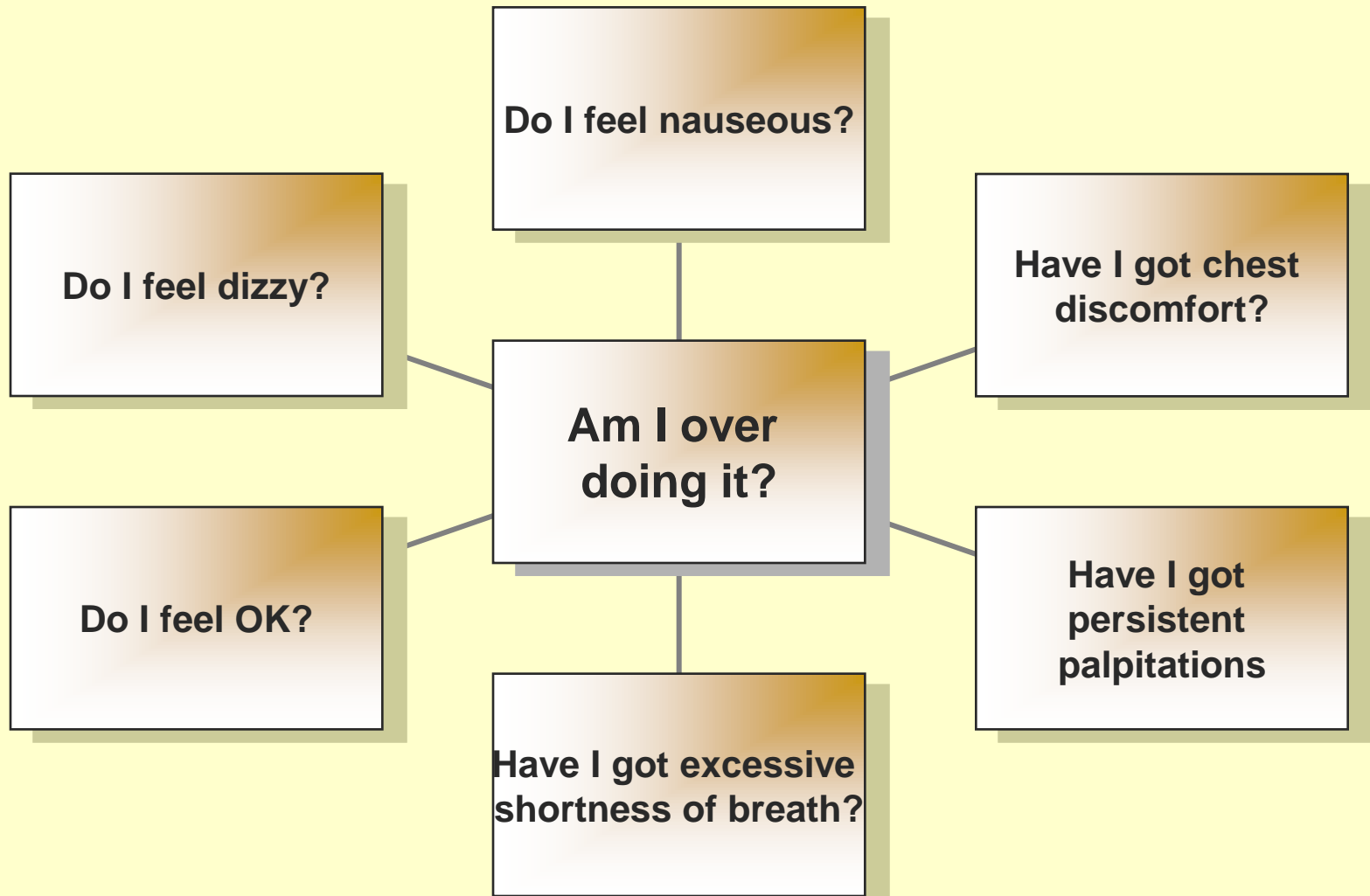
**Get a little
breathless every
day**



[After Exercising]

- May feel tired
- May feel a little muscular aching

How Do I Know If I am Over Doing It?



[Tips]

- Don't just stop!
- Keep feet on the move
- Warm up for longer during cold weather
- Decrease intensity during hot weather
- In hot weather extend cool down
- Wear the right clothing



[Tips]

- Don't be frightened
- Keep relaxed, listen to your body



[Sensible Precautions]

- Take medications with you
- Take ICD card with you
- Don't exercise if you feel unwell
- Don't exercise after a meal
- Wear the right clothing
- Don't exercise if extremely hot or cold
- Be aware of how you feel compared to how you usually feel

Exercising With An ICD

- ICD detection threshold
- Type of therapy
- How quickly the heart rate is allowed to go before therapy is delivered
- Whether the device is set for VT or VF
- Before undertaking strenuous exercise check with your cardiologist or ICD nurse specialist

[Be Sensible]

- Choose your exercise to suit you, and keep you safe, it should be pleasurable.

Shoulder Problems Post ICD Implantation

Axioscapular group

Levator scapulae
Rhomboids
Trapezius

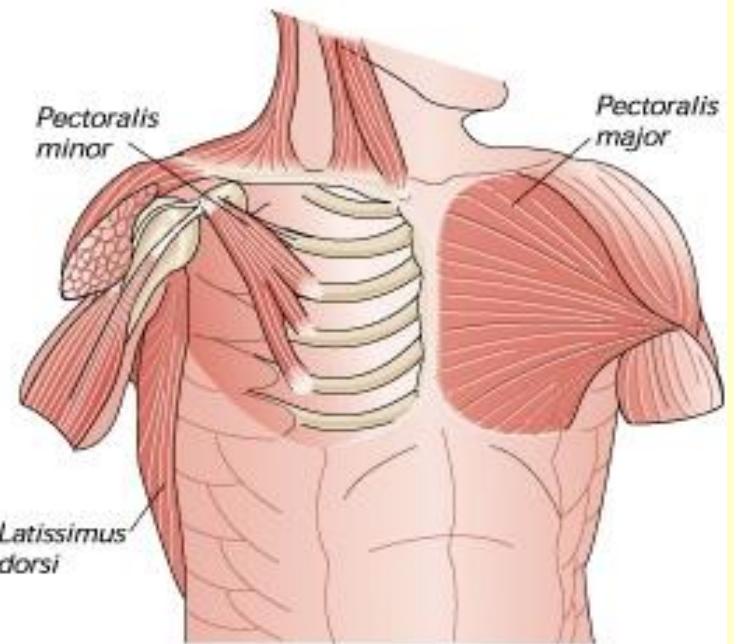
Scapulohumeral group

Supraspinatus
Infraspinatus
Deltoid
Teres minor

Latissimus dorsi

Posterior view

Axioscapular group (pulls shoulder backward)
Scapulohumeral group (rotates shoulder laterally; includes rotator cuff)



Anterior view

Axiohumeral group (rotates shoulder internally)

[Exercising The Shoulder]

- Restrict arm elevation as long as advised to do so, but keep the shoulder moving.

[Before Arm Can Go Up]

- Rotations
- Shrugging in a square
- Forward and backward swinging
- “Flying”
- Lots of functional activity

[Once Arm Can Go Up]

- Finger walking on wall
- Even more functional activity
- Walking stick exercise
- “Pringles” exercise

[Keep Moving!]





Thank you for your time!

[Any Questions]



[References]

- Physical activity and exercise advice for patients with an ICD - Arrhythmia Alliance
- With thanks to Hannah Hindmarsh