

MSE = Muscular Strength and Endurance and this is an overarching term

However, terminology for the purposes of this course (and lesson planning) will be as follows

Body Conditioning (Body Con) = STANDING exercises using equipment such as hand held weights, bars, plates, bands etc.

MSE = FLOOR BASED bodyweight exercises such as ab curls, pressups, dorsal raises, leg raises, glute bridges etc.

The following slides should be read in the context of these two broad definitions.

Formats of conditioning classes

To achieve all-round fitness, an exercise program must include strength and endurance work.

Improvements in muscular strength and endurance can be obtained by the performance of various weight training and bodyweight exercises.

There are several formats commonly found in most aerobic programmes, such as:

- ◆ Hips Bums and Tums
- ◆ Body-Sculpt
- ◆ Combination classes

The aim of the MSE component

Through the use of hand held weights and other resistive props, such as tubing and rubber bands, sufficient resistance during these exercises can be obtained, thus resulting in a training effect being achieved.

The goal of these workouts is to tone and shape, increase strength and offer a low to moderate cardiovascular workout, rather than increasing muscular size which is more suitably accomplished in the gym.

Muscle conditioning can be included as a component of any other mainstream class, or as a stand alone format.

Types of equipment used

The equipment usually found in an exercise to music class that concentrates on conditioning are:

- ◆ Dumbbells
- ◆ Aerobic Hand Weights
- ◆ Wrap Around Weights
- ◆ Body Bars
- ◆ Barbells
- ◆ Exercise Tubing



Selecting appropriate weights

It is important participants select an appropriate weight for the workout. Each participant should be able to successfully complete the entire class without the use of any form of resistance before using any weight.

This will ensure they are of an appropriate fitness level and are able to perform each exercise with correct form and technique. Once this level has been reached, they should then be advised to add resistance.

The instructor should ensure participants do not use weights which are too heavy as they will struggle through the class which will be obvious by the poor execution of exercises. They may also fail to perform exercises throughout the full range of movement.

Variations in instructing

Many of the exercises used in muscle conditioning classes are based on standard resistance training exercises.

In the aerobic class, rhythm and lever variations can be used to make these exercises more interesting.

Rhythm variations may include some of the following possibilities -

- ◆ 1 count down 1 count up
- ◆ 2 counts down 2 counts up
- ◆ 3 counts down 1 count up
- ◆ 1 count down 3 counts up
- ◆ 4 counts down 4 counts up
- ◆ 6 counts down 2 counts up

TASK

List other rhythm variations for a variation of exercises to work:

- The back
- The abdominals
- The lower body
- The upper body



Progressive overload

Each exercise should flow smoothly from one exercise into the next.

When teaching a conditioning section, exercises should be grouped together in sets. This ensures muscle groups are worked in a way and overloaded enough times to result in a training effect is being achieved.

For example, the following sequence could be performed three times in a row to work the biceps and the triceps sufficiently:

- 8 x bicep curls, 2 counts down 2 counts up
- 8 x hammer curls, 3 counts down 1 count up
- 8 x tricep kick backs, 1 count back 3 counts in
- 16 x single tricep kick outs, 1 count out 1 count in

Examples of MSE exercises

The exercise	Example of Progression	Example of adaptation
Box Press Up	Full Press Up	½ press up
Unseated tricep dip	Tricep dip on a step	Seated tricep dip
Abdominal curl	Abdominal crunch	Reverse curl
Plank	Plank with one foot raised	Plank with knees on floor
Squat	Squat with body bar	½ squat
Lunge	Lunge with dumb bells	½ lunge
Lying side leg raises	Leg raise with ankle weight	Lying side leg raise with bent leg (1/2 lever)
Dumb bell bicep curl	Add more weight or more reps	Remove dumb bells

TASK

List three MSE exercises, then give as many examples as you can to progress the exercises and to make them easier for participants.



Examples of alternative exercises

Alternative exercises must also be planned for participants unable to achieve correct technique in the given exercise.

Examples of alternative exercises that could included in the plan are:

The exercise	Example of alternative
Box Press Up	Dumb bell tricep extension
Seated tricep dip	Dumb bell tricep extension
Abdominal curl	Plank
Plank with knees on floor	Abdominal curl
Squat	Ball squat
Lunge	Squat
Lying side leg raises	Standing side leg raise
Dumb bell bicep curl	Upright row

TASK

List six MSE exercises, then give as many examples as you of alternative exercise to work the same muscle group

Ensuring correct lifting technique of equipment

It is essential to advise participants of the correct lifting technique for picking up and returning weights, mats and other equipment to the floor.

An incorrect lifting technique can result in the participant injuring their back and prevent them from continuing with their exercise program.

A demonstration of the correct way to lift an object must be shown by the instructor prior to any equipment being used.

Multi-level instruction re-cap

The following guidelines will assist you with multi-level instruction:

- ◆ Explain to participants that they should work to a level which is suitable for them.
- ◆ Introduce each new move in the lower intensity variation first to avoid beginner participants attempting exercises with too high an intensity level.
- ◆ Introduce higher intensity options progressively.
- ◆ Occasionally perform the higher intensity exercises to motivate the more advanced participants
- ◆ Motivate and reassure all participants.

Decreasing the intensity - regression

Decreasing the intensity of an exercise includes:

- ◆ Decrease resistance – shorter lever length,
- ◆ Decrease repetitions
- ◆ Decrease range of movement
- ◆ Decrease muscular effort by not ‘working’
- ◆ Decrease directional changes
- ◆ Alternative arm grips / leg stances can be offered when performing MSE exercises

Increasing the intensity - progression

Increasing the intensity of an exercise includes:

- ◆ Increase resistance – longer lever length or add more weight,
- ◆ Increase range of movement
- ◆ Encourage participants to really ‘work’
- ◆ Increase directional changes

TASK

Plan 4 MSE exercises that work the-

- Back
- Abdominals
- Upper body
- Lower body

Plan the transitions between each one so that the routine flows

Plan the rhythm changes you might use

Plan the adaptations and alternatives you might use

Training different components of fitness – flexibility



Flexibility

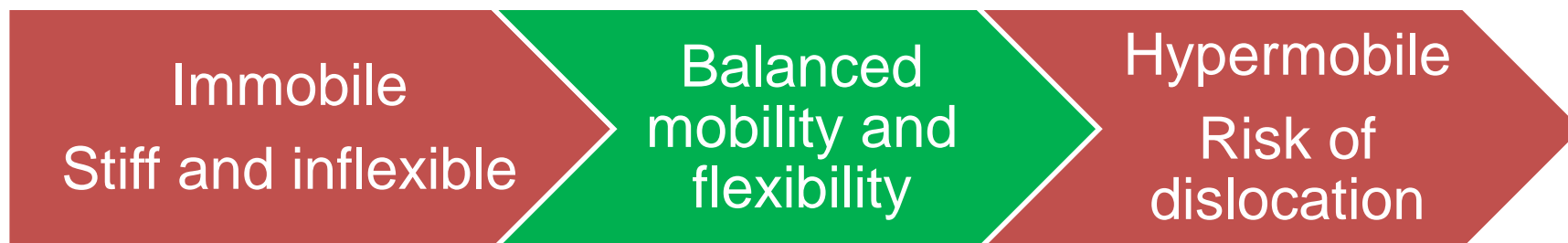
Flexibility - the range of movement about a joint or series of joints



Flexibility continuum

Limited flexibility

Extreme flexibility



The ability to move through the full potential range of movement at specific joints.

The short-term benefits of flexibility training include:



- Improved mobility
- Reduced muscle tension and tightness.
- Improved physical and mental relaxation.
- Improved range of motion.
- More effective and efficient movements
- Reduced risk of joint or muscle strains.

The long-term benefits of flexibility training include:



- Improved mobility for the joints and muscles.
- Reduced muscle tension and tightness.
- Improved physical and mental relaxation.
- Improved range of motion.
- More effective and efficient movements
- Improved posture.
- Reduced risk of joint or muscle strains.
- Reduced risk of low back pain.
- Improved coordination by allowing for greater ease of movement.
- Improvement and development of body awareness.

Flexibility



Frequency	2-3 days a week. Ideally every day
Intensity	To the point of mild tension and mild discomfort
Time	Static stretches 15—30 seconds 2-4 repetitions of specific muscle stretches NB: A total of 60 seconds per muscle group is recommended. Stretches can be repeated 2-4 times to achieve this total
Considerations	Ensure the body is warm before stretching Lengthen all muscles before exercise (dynamic or static) Stretch all major muscle groups after work (static stretching – developmental or maintenance)

Applications of static stretching

Maintenance:

- Short stretches - 15 seconds.
- Use in the warm-up or cool-down
- Maintain flexibility in muscles that are not particularly tight.
- Stretch to point of mild tension and hold.

Developmental:

- Held for a longer period of time - 30-60 seconds.
- Used in the cool-down
- Improve the range of motion in areas of tightness
- When the tension eases (stretch reflex) the stretch is taken further and held



Exercise session structure

Lengthening muscles and moving joints through range of motion is part of preparation

Warm up.

To prepare the body

To train specific components of fitness

Stretching and flexibility can be one of the main components of fitness trained, e.g. yoga

Developmental and maintenance stretches

Cool down.

To return the body to non-exercise state

Dynamic stretching

- Controlled movement of the limbs to lengthen muscles to the end of their range of motion
- Around eight to ten repetitions of each movement are performed under control, gradually taking the stretch further
- Helps to maintain body temperature, e.g. warm-up
- No bouncing or jerking (ballistic stretching – exceeds ROM)

Pair task:

Find and demonstrate an example of a dynamic stretch

Factors affecting flexibility

How would each of the factors listed affect flexibility?

- Age
- Gender
- Physique / Body type
- Activity level
- Illness
- Stress
- Environment, e.g. temperature

The aim of the post workout stretch

Without regular stretching, there is a tendency for muscles to lose their flexibility so that when called upon to perform an extreme movement, as in dynamic sports or in an emergency, they are less able to extend to their full range of movement, resulting in damage to the muscle tissue.

The aim of the stretches is to increase the participants range of movement and flexibility.



The cool-down stretch content

- ◆ Relaxation should be encouraged in this component
- ◆ Slower music at less volume will set the mood for the relaxation and indicates the beginning of the end of the class
- ◆ Stretches should flow from one to another without the participants having to move around too much
- ◆ Stretches need to be performed whilst the body is in a comfortable position and this is best performed whilst lying or sitting on a mat
- ◆ Stretches should be maintenance and developmental
- ◆ All major muscle groups must be stretched



TASK

List the muscles that require stretching at the end of a group exercise to music session and think about the different stretches that could be performed to target these muscles

Also consider:

Adaptations – progressions and regressions

Relaxation

- At or towards the end of M&D stretching
- Scripted (for portfolio)
- Tense/relax
- NO scenarios
- NO religion/spiritual
- NO enforced position

Revitalise

- 1 minute approx
 - Silly, funny
 - Leave class on a high
 - Safe to travel home
-
- Lead into ending the class, Q&A/feedback

Bringing the class to an end

The instructor needs to prepare their participants emotionally and physically to finish the session safely:

- ◆ They should praise the participants for all their efforts and achievements during the session
- ◆ The Instructor should give any further information the participants may need i.e information on any changes e.g. cost, time, place
- ◆ As a courtesy to the instructor and participants in the next class, the exercise area should be cleared as quickly as possible.

Recording Injuries and Accidents - It is important to follow the facility's procedures and injuries and/or incidences.

Reviewing the session

On completion of the class, the instructor should commend participants for their efforts.

The instructor should ask for any feedback on the class as a way of improving their teaching skills.

If participants have any questions, the instructor needs to make them self available after the class.

The participants must be included during the review of the session to maintain retention levels and to ensure the sessions are effective and meeting the needs of the participants.

TASK

- What type of questions would an instructor ask at the end of the session to gain feedback from their participants?
- What would the questions be?



Gaining feedback from participants

The information gathered should then be measured as to whether it has met the expectations of the instructor, and if not what can be done to rectify it in the future.

The types of questions that should be asked are:

- ◆ Did the participants enjoy the session?
- ◆ What have the participants achieved during the session?
- ◆ What would they suggest to improve the session?

Reflecting on providing exercise to music sessions

The instructor must use this feedback to plan the progression or modifications of the sessions by asking themselves these questions:

- ◆ Did the session meet the aims set out in the session plan?
- ◆ Did the session meet the needs of the participants?
- ◆ To further improve teaching abilities, it is important for the instructor to then evaluate their own performance.

This assessment would include the noting of any improvements which can be made to the original class plan. This can then be referred back to when the instructor reviews previous classes.