1. **Muscular Endurance Training**
3-5 sets of 12-100 repetitions, 30-180 seconds rest between sets.

This can be done as standard compound repetitions with bodyweight (e.g., pushups), or weights or isometrics (planks etc), but should not include any slow or major eccentric component (which means no plyometric, jumping or slow lowering component). Sets should be taken close to failure.

This can be done (in most cases), 2-3 times per week, separate from or at end of other resistance training work. Adjust frequency, sets etc. according to recovery ability and progress.

Primary source of endurance adaptation is mitochondrial respiration, not respiratory or cardiac.

2. **Long Duration Endurance Training**
1 set, of 12 minutes or longer (up to 45, 60min to several hours depending on training goals).

Must be sustainable for that duration in good form. Run, row, swim, bike, etc.

This can be done in most cases, 1-3 times per week, separate from or at end of other resistance training work. Adjust the frequency, sets etc. according to recovery ability. Done more than 2 times weekly for more than 30 minutes this will generally start to compromise hypertrophy unless is done at very low speed, intensity.

Source of adaptation: efficiency of movement. Adaptations are also via changes to capillary density, heart stroke volume.

3. **Anaerobic Endurance Training**
3-12 Sets, Ratio of work to rest 3:1 or 1:3 (the latter allows for better form/quality of work due to longer rest.)

For example, could do a movement for 30 seconds on, 10 seconds rest (3:1) or 20 seconds on, 60 seconds rest (1:3) or some variant thereof.

This can be done in most cases, 1-3 times per week, separate from or at end of other resistance training work. Adjust the frequency, sets etc. according to recovery ability. Source of adaptation: increased cardiovascular output, given that it takes heart rate up and V02 Max close to 100%.

4. **Aerobic Endurance Training**
3-12 Sets, Ratio of work to rest 3:1 or 1:3 (the latter allows for better form/quality of work due to longer rest.) Or 1:1 ratio.

For example, run a mile, then rest/walk for the same duration as the mile run took. Do this 1-3X per week depending on other training. Work up to 5-7 mile of running total. Proceed slowly! Remember, this is endurance work. Source of adaptation: increased cardiovascular output, capillary density, and, given that it takes heart rate up and V02 Max to 100% or greater, major cardiovascular adaptations will be stimulated.

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