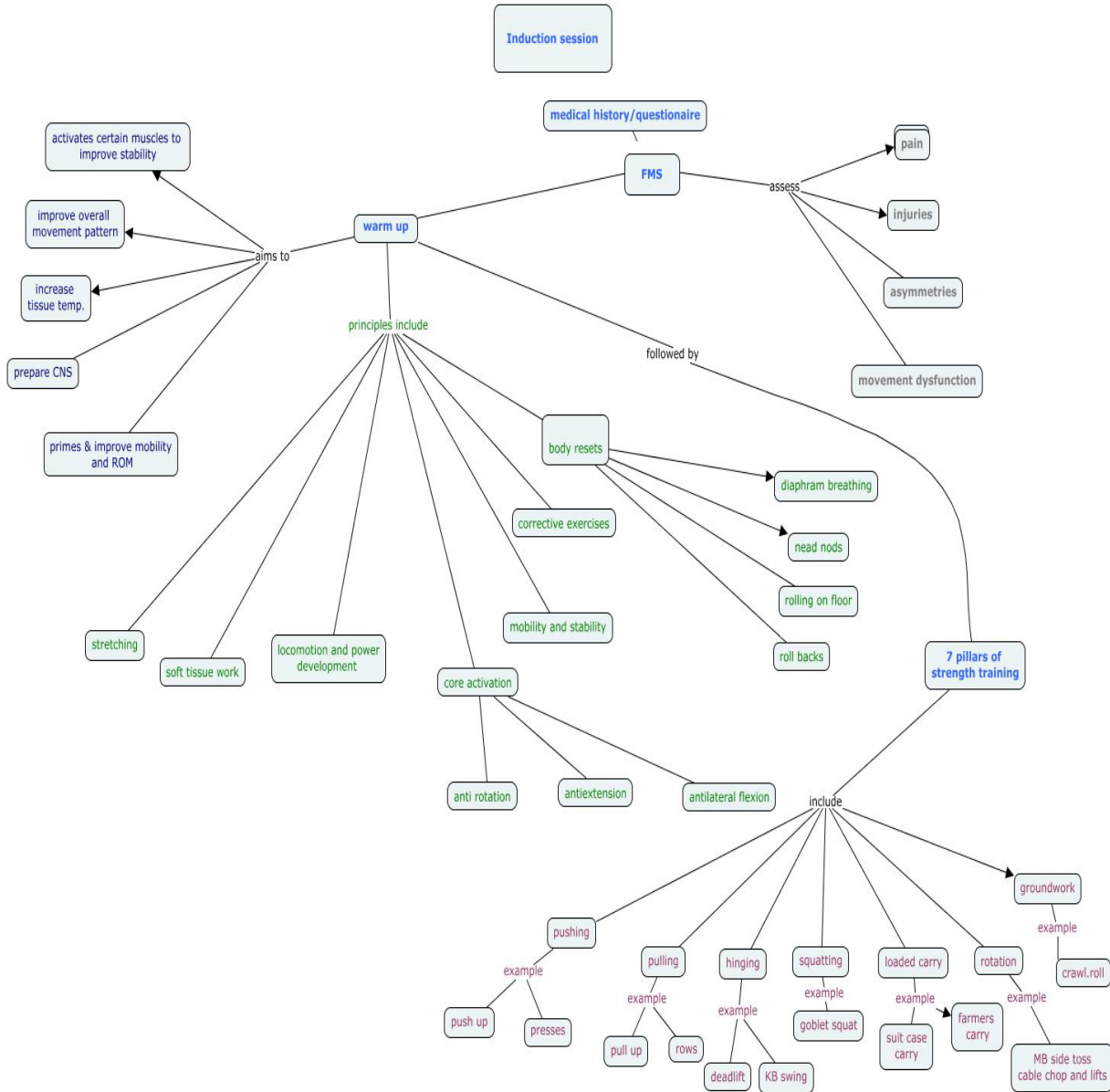


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***“Strong people who move well and move often have a better quality of life.”***

At state of fitness continuous efforts are made to improve the existing training model. A lot of fitness professionals have helped to shape up the training philosophy practiced at the state of fitness. Due to these continuous efforts we are now in a good position to train large and small groups. All personal trainers in the state of fitness are like a cohesive team working together towards a common goal.



## ESSENTIALS OF A WARM UP

Increase tissue temperature	<ul style="list-style-type: none"> <li>• This enhances the muscular system</li> <li>• Improves muscular extensibility and improves performance and movement.</li> </ul>
To prepare the CNS	<ul style="list-style-type: none"> <li>• The CNS needs to be fired up to optimize movement.</li> </ul>
To prime and improve movement	<ul style="list-style-type: none"> <li>• One of the main reasons to warm up is to improve mobility and range of motion</li> </ul>
To rehearse and improve overall movement patterns	<ul style="list-style-type: none"> <li>• Helps connect the mind and body to the movement that is about to come</li> <li>• Low level loads and high intensity can be helpful for improving certain movements.</li> </ul>
To activate certain muscles to improve stability	<ul style="list-style-type: none"> <li>• The goal is to pay attention to certain muscle groups that may be normally neglected. The glutes, core musculature and middle back can always use some extra attention.</li> </ul>

*A good warm up can take between 15 to 20 minutes. It should not be haphazard and each exercise should have a purpose behind it. While designing a warm up it is important to have a clear road map to accomplish the client's goals while also providing regressions and progressions. In a small group setting **the important principles** required to construct a proper warm up include*



## 7 pillars of strength training

***“Absolute strength is the glass. Everything else is the liquid inside the glass. The bigger the glass, the more of everything else you can do.”***

Strength training helps a body become more efficient and resilient against obstacles. It is the corner stone of the fat loss program at State of Fitness. There are seven different movements everyone at SOF needs to become competent in.

## **1.Push**

- Vertical, horizontal and diagonal

### **Foundation: Push up**

- A very huge component of strength straining even though it is an old movement

### **Intermediate: One arm military press**

- Involves overhead pressing of KB
- Require good shoulder mobility
- Good starting weight is 10-16 kilo for girls and 12-24 for guys.

## **2.Pull**

- Vertical, diagonal and horizontal direction
- Horizontal pulling is our go to for people who cannot lift overhead

### **Foundation: TRX row**

Very effective and easy to learn

### **Intermediate: Pull up**

- compound exercise
- recruits large number of back muscles, shoulders and arms
- great for building upper body strength

### **3.The hinge**

#### **Deadlift**

- Works almost all muscles of the body especially with heavier load

#### **Swing**

- Foundation for all kettlebell training
- Improves CV conditioning,
- Increases power output
- Burns fat
- builds muscle

### **4.squat**

#### **Foundation: goblet squat**

#### **intermediate: RFE split squat**

- requires a good amount of hip and knee stability and mobility

### **5.loaded carry**

- increases work capacity

**foundation: farmers carry**

- self-correcting move

**intermediate: waiters carry**

- low impact on shoulder but requires a great deal of stabilization

**6.Ground work**

**Foundation: Bear crawl**

- Improves both mobility and strength
- Increases independence as a senior

**Intermediate: Turkish get up**

- improves overall movement and proprioception
- strength and muscle gains
- improve core
- strength

**7.Rotation/anti rotation**

involves anti rotation but not at lumber spine or lower back

foundation: Chop

intermediate: Cable lift

## Special Considerations For programming

### 1. Reps and sets

Depending on the goals of a program the repetitions and sets can vary in number.

- **For Olympic type** movements where our goal is to develop explosive power via the CNS the preferred rep range is **1-6**.
- For **increasing strength** **1-5** reps,
- for muscle building and burning body fat 8-12 reps work best.
- **Strength** moves such as deadlifts, trap bar deadlifts, heavy pressing movements, and pull-ups **3-8**
- For hypertrophy **8-12**
- Almost any other strength movement fits in this rep range (**8-12**) e.g. Pulls, presses, goblet squats, single leg work, core work, direct arm work.
- For bodybuilding movements **25 rep** rule is used
- Basic strength moves such as goblet squat, single leg squat, one leg DL variation, kettlebell deadlift, pushing exercises, pulling exercise etc. fall into 25-35 rep range of working sets.
- **For loaded carry** variations e.g. farmers walk, waiters walk, suit case carry, overhead carries and sled pushes mostly **3-5 sets of 30-100 meters**.



## 2. Undulating periodization

Research has shown that instead of periodization **undulating periodization** is highly effective in inducing maximal strength gains. The body adapts to the rep range faster than the exercise itself so with undulating periodization program instead of changing the exercise **the sets, reps** and **tempo** and **rest period** are changed in every single workout. This results in a larger variety of fun and different workouts that result in better and faster gains.

## 3. Frequency

At SOF 3-4 per week method works best. This means 2-3 semi private or private training sessions and 1-2 conditioning sessions.

## 4. Bilateral and unilateral training

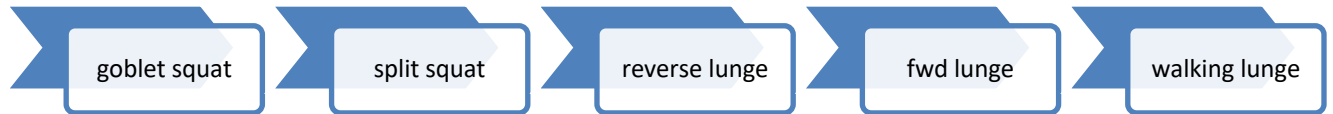
### Movement variations

- **Hinge: leg curls, hip lifts and thrusters (hip dominant exercises)**

These posterior chain exercises can be used as a regression for people with lumbar issue, or lower back pain

- **Squat**

The lunge is also included in this pillar. Both are used interchangeably in programming.



**lower body and upper body**

Single leg and double leg workouts are all balanced like the squats and hinge movements as well as upper body for unilateral and bilateral movements.

**5. Balancing of movement patterns**

Following principles ensures balance of movement pattern and prevents undertraining or overtraining of certain muscles. The 7 pillars are flowed and ensure balance and consistency in the programs for all members

For every hip/hinge dominant pattern in a workout there is a complimentary squat or lunge pattern and vice versa.
Each workout has mostly the same volume (sets, reps and load) for both push and pull movements (strength portion)
Vertical and horizontal pulling and pushing movements are alternated in each workout (strength portion)
Each workout alternates a squat and lunge in strength portion of the workout.
Each workout alternates a true hinge with a hip dominant pattern in strength portion
Loaded carry, anti rotation and ground work can be included in the strength or warm up portion of the workout

**6. Training efficiency and density**

Workout **density** is the amount of work done in a given amount of time. The greater the density the greater

the calorie expenditure. In HIIT or Tabata we aim to decrease rest period which increases the density of the workout. Workout density entails we use our workout time as efficiently as possible

### **7. Finisher-post strength workout**

The goal is strength moves performed at high reps

### **8. Equipment and space considerations**

Two very important factors to consider for programming.

## **Small Group Training Workouts**

The small group workouts involve a detailed **warm up** and the **strength training** component based on the seven pillars.

### **Warm up**

The warm up includes five principles:

Correctives	Body resets x 5-10	Mobility X5-10	Activation	Locomotion & power development x 2-3
<ul style="list-style-type: none"> <li>• Strap leg lowering</li> <li>• ½ get up</li> <li>• 90/90 hip int/external rotation etc.</li> </ul>	<ul style="list-style-type: none"> <li>• Crocodile breathing</li> <li>• Head nods</li> <li>• Hip lifts etc.</li> </ul>	<ul style="list-style-type: none"> <li>• FMS circuit</li> <li>• Goblet squat</li> <li>• Toe touch squat</li> <li>• SLDL</li> </ul>	<ul style="list-style-type: none"> <li>• McGill Protocol – Side Plank, Bird Dog, McGill Curl up etc.</li> </ul>	<ul style="list-style-type: none"> <li>• Crawl</li> <li>• Med ball tosses</li> <li>• Squat jumps etc.</li> </ul>

- Strength training workouts involve **metabolic resistance training** .
- The aim is to work through the seven pillars. Every muscle group is worked frequently and with an intensity that creates a metabolic disturbance leaving the metabolism elevated for a longer period of time.
- Each movement has regression options and can be lateralized for members according to their restrictions.
- The Finisher is not only aimed at getting the heart rate up but to perform strength moves at a **high intensity** for a short amount of time.

## Large group training template

### Metabolic conditioning: the finishers

- Involves large muscle groups
- Short period of hard work with minimal rest
- Challenges the body both physically and mentally
- At SOF met con is applied through intervals and circuit training.
- Since strength training doesn't entirely help the aerobic system the conditioning sessions take care of that.
- Combining aerobic bases movements e.g. ski erg, bike, rower with large movements like pushing the sled, ball slams, kettlebell swings etc. is a great way to burn fat.

### Aerobic training

HIIT or Tabata training do not help increase oxygen uptake so basic aerobic training is necessary to balance it out. Ski Erg, Bike, Rowers are low impact and can be combined with the HIIT or Tabata to create the perfect balance to hit both aerobic and anerobic systems.

## Large group training workouts

large group classes in the SOF follow the following pattern

Warm-up (15-20)	<ul style="list-style-type: none"><li>• Body resets</li><li>• Mobility</li><li>• Activation and core</li><li>• Active/Dynamic warm up</li></ul>
Conditioning	<ul style="list-style-type: none"><li>• May include Tabata intervals 20/10</li><li>• Descending ladders 10,9,8,7....</li><li>• Circuits</li><li>• Partner workouts</li><li>• Mostly lasts 20-25 minutes</li></ul>
Finisher	<ul style="list-style-type: none"><li>• Aim to produce high intensity moves for a short amount of time</li><li>• Can be used for ground work, loaded carries or important pillars not addressed during the conditioning phase.</li></ul>

Cool Down	Aims to bring heart rate down, stretch muscles to avoid stiffness and cramps.
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## Exercise progression and regression

IT is important to remember that clients can have certain limitations or pre-existing medical conditions which require exercises to be

- regressed,
- progressed
- modified
- Lateralized

Exercise	Baseline	regression	progression
power	Jump Squat w/stick	TRX jump squat	Continuous jump squat
Anti-rotation	hand plank	Elbow plank	Push up tap
Horizontal press	Push up	Elevated push up	Feet elevated push up
Horizontal pull	1-arm DB row	2-point DB row	2 DB row

Vertical pull	Pull up/Chin up -2 second hold 3 sec Ecc	Bar hangs hollow position	Chin up/pull up
Knee dominant	Split squat	Split squat hold	Goblet split squat
Hip dominant	Goblet reverse lunge	BW reverse lunge	2 DB reverse lunge

## Functional Movement Screen

FMS correctives comprise of

### 1. Mobility screens

- Active straight leg raise
- shoulder
- mobility
- ankle mobility

### 2. Motor control

- Rotary stability
- Trunk stability push up



## Corrective Exercise Progressions

The corrective exercises associated with each movement pattern in the FMS are a continued part of the screen. The corrective exercises are not simply performed with blind confidence— they should be used as a gauge to identify proficiency or deficiency for each exercise task. The exercises follow a linear path from basic mobility to basic stability to movement to strength.

Mobility	<ul style="list-style-type: none"><li>• Focuses on joint ROM, muscle flexibility and tissue length.</li><li>• Includes stretching or joint mobility within movement pattern.</li></ul>
Stability	<ul style="list-style-type: none"><li>• Postural control work with focus on starting and end range postural control.</li></ul>
Motor control	<ul style="list-style-type: none"><li>• Incorporates the use of mobility and stability into specific movement patterns to reinforce coordination and timing.</li></ul>
Strength	<ul style="list-style-type: none"><li>• Aims to build strength.</li></ul>

## Corrective Prehab Protocols –

### Private Training

Rehab protocol include

- Multi segmental flexion (toe touch)
- Multi segmental extension (back bend)
- Rotation
- Hip flexion
- Hip extension
- Hip external rotation
- Hip internal rotation
- Cervical flexion
- Cervical extension
- Cervical rotation
- Ankle dorsiflexion
- Wrist flexion extension and rotation