

TAKE A CLOSER LOOK AT WHAT IT MEANS TO BE A FIREFIGHTER

COMMIT TO GET FIT

WITH

LEICESTERSHIRE
FIRE and RESCUE SERVICE

ASPIRATIONAL TO

INSPIRATIONAL



MATT FIGHTS FIRES
AND TRULY **INSPIRES**

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આ દસ્તાવેજની કોઈપણ ભાગને સમજવામાં જો આપ કોઈ મદદ ઇચ્છતાં હોય તો મહેરબાની કરી લેસ્ટરશાયર ફાયર એન્ડ રેસ્ક્યૂ સર્વિસ (Leicestershire Fire and Rescue Service) Headquarters, 12 Geoff Monk Way, Birstall, Leicester, LE4 3BU પર સંપર્ક કરવો. મહેરબાની કરી આપનું નામ અને સરનામું પૂરું પાડ્યો અને કયા પ્રકારની મદદ કે જી આપને જોઈએ છે, તે વિગતવાર જણાવ્યો.

এই ডকুমেন্ট এর যে কোনটি বুঝতে যদি আপনার সহায়তা দরকার হয় তবে অনুগ্রহ করে যোগাযোগ করুন: লেস্টারশায়ার ফায়ার ও রেসকিউ সার্ভিস (Leicestershire Fire and Rescue Service) Headquarters, 12 Geoff Monk Way, Birstall, Leicester LE4 3BU দয়া করে আপনার নাম ও ঠিকানা এবং আপনার কি ধরনের সহায়তা দরকার তা উল্লেখ করবেন।

ਜੇਕਰ ਇਸ ਦਸਤਾਵੇਜ਼ ਦੇ ਕਿਸੇ ਵਿਸ਼ੇ ਨੂੰ ਸਮਝਣ ਲਈ ਤੁਸੀਂ ਕੋਈ ਮਦਦ ਲੈਣੀ ਚਾਹੁੰਦੇ ਹੋ ਤਾਂ ਕਿਰਪਾ ਕਰਕੇ ਲੈਸਟਰਸ਼ਾਇਰ ਫ਼ਾਇਰ ਐਂਡ ਰੈਸਕਿਊ ਸਰਵਿਸ (Leicestershire Fire and Rescue Service) Headquarters, 12 Geoff Monk Way, Birstall, Leicester, LE4 3BU ਨਾਲ ਸੰਪਰਕ ਕਰੋ। ਮਿਹਰਬਾਨੀ ਕਰਕੇ ਆਪਣਾ ਨਾਂ ਅਤੇ ਸਿਰਨਾਵਾਂ ਨਾਲ ਦਿਉ ਅਤੇ ਦੱਸੋ ਕਿ ਤੁਹਾਨੂੰ ਕਿਸ ਤਰ੍ਹਾਂ ਦੀ ਮਦਦ ਦੀ ਲੋੜ ਹੈ।

如需要協助理解本文件內任何資料請聯絡：里斯特郡消防及救援服務 (Leicestershire Fire and Rescue Service) Headquarters, 12 Geoff Monk Way, Birstall, Leicester LE4 3BU 請提供閣下姓名和地址以及說明哪條文需要幫助。

Jezeli potrzebujesz pomocy w zrozumieniu treści tego dokumentu skontaktuj się z (Leicestershire Fire and Rescue Service) Headquarters, 12 Geoff Monk Way, Birstall, Leicester LE4 3BU, podając swoje imię, nazwisko i adres i wyjaśniając jakiej pomocy potrzebujesz.

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and Fire Leicestershire) اگر آپ کو اس دستاویج کے کسی بھی حصے کو سمجھنے کے لیے کسی قسم کی مدد درکار ہے تو براؤزر کے منیو میں "Stonewall Diversity Champion" سے رابطہ کریں۔ براؤزر کے منیو میں "Stonewall Diversity Champion" سے رابطہ کریں اور آپ کو جس قسم کی مدد درکار ہے اس کی وضاحت کریں۔



COMMIT TO GET FIT

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INTRODUCTION

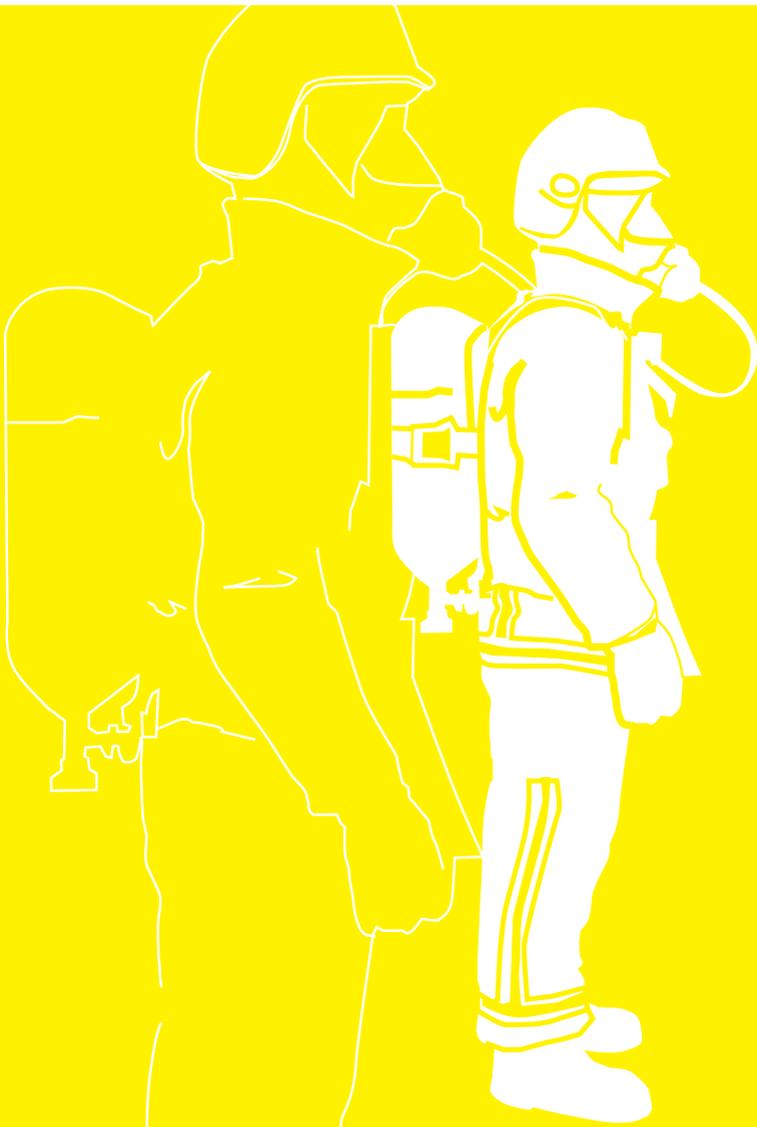
You are probably reading this because you are thinking of becoming a firefighter. You may be wondering how fit you need to be or even how to get fit. This booklet gives you the answer to both!

Firefighting places physical and mental demands on the body which are quite unique. It is important that you are physically and mentally prepared for the demands that a job within Leicestershire Fire and Rescue Service makes.

This Commit to Get Fit booklet has been produced to help those thinking of becoming firefighters prepare for the National Firefighter Selection Tests (NFST). It can also be used as a general guide on how to get and stay fit. The added benefits of following this good advice can include improved performance, better concentration and more energy. Overall, a fitter you!

SAFETY PARTICIPATION:

Leicestershire Fire and Rescue Service accepts no responsibility for anyone injuring themselves while attempting any of the suggested exercises listed in this booklet. We advise that if you are new to physical activity, have a medical condition, are pregnant or are unsure of your suitability to carry out an exercise programme, you should first consult with your doctor before undertaking one. If you are unsure how to complete the exercises in this booklet, you should seek assistance from a fully qualified fitness professional for instruction.



FITNESS REQUIREMENTS AND RECRUITMENT STANDARDS

FITNESS REQUIREMENTS AND RECRUITMENT STANDARDS

The role of a modern day firefighter is varied and can be physically demanding. Working, sometimes in extreme environmental conditions, for long periods of time, while using heavy equipment, means that a good level of aerobic fitness and good all round strength is required.

As a result of this, the NFST have been designed to reflect some of the actual tasks that a firefighter performs.

- Ladder climb
- Casualty evacuation exercise
- Simulated ladder lift exercise
- Ladder extension test
- Test of manual dexterity
- Enclosed space simulation
- Equipment carrying exercise



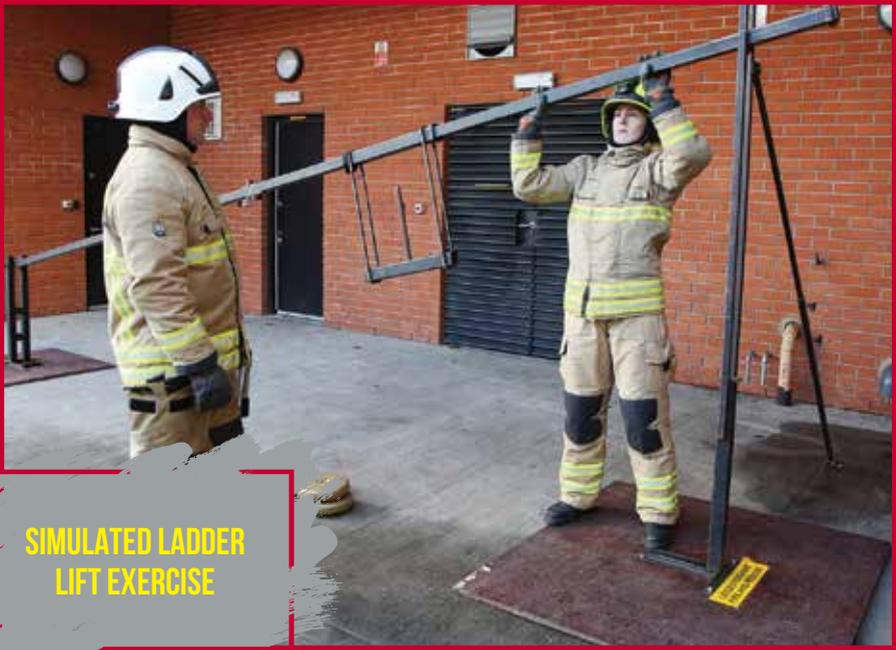
LADDER CLIMBING EXERCISE



**TEST OF MANUAL
DEXTERITY**



**CASUALTY
EVACUATION
EXERCISE**



**SIMULATED LADDER
LIFT EXERCISE**



**LADDER EXTENSION
TEST**

**ENCLOSED SPACE
SIMULATION**



**EQUIPMENT
CARRYING EXERCISE**



At the medical stage of recruitment, a prospective firefighter will undergo a measurement of their aerobic capacity (fitness). This is called a VO2 max assessment. Our methods of assessment will involve a cycle based test (where your oxygen uptake is monitored using a gas analyser). A minimum aerobic capacity score of 42.3 ml/kg/min is required. It is also a requirement that this minimum level of fitness is maintained throughout a firefighter's career.

A good way of self assessing your fitness would be to carry out a standard 20m Bleep Test. If you are able to reach Level 8 Shuttle 8, you stand a good chance of being able to reach the necessary fitness standard to become a firefighter.

If you do not already, we advise you to follow an exercise program that will enable you to perform well in these tests and allow you to maintain your health and fitness throughout your career. This will also help set a good foundation for your retirement!





HEALTH AND LIFESTYLE

HEALTH AND LIFESTYLE

The aim is to get into good lifestyle habits. Remember, you are not getting fit just to get into the Fire and Rescue Service. The hard work begins at training school and continues throughout the job.

It is about establishing a health and fitness routine, incorporating exercise into your lifestyle and having a healthy and balanced diet. It is also important that you are as hydrated as possible. Drinking plenty of water or fruit juices will help keep fluid levels up. Caffeine has the opposite effect and can dehydrate the body. Therefore, limiting drinks containing caffeine (these include coffee, tea and some carbonated soft drinks), is beneficial.

Do you smoke? Smoking has a significant negative effect on aerobic capacity and can seriously decrease performance. Stopping smoking has enormous health benefits and should be a serious consideration.

A major controllable factor in your health and lifestyle is your diet. Eating a healthy balanced diet has a tremendous impact on your health. It provides all the essential vitamins and minerals the body needs, it supplies the body with all the energy it requires and it helps in weight management. Do not over-indulge in foods that are high in sugar, salt or fat. Finally, remember to limit your alcohol intake. The Government's recommendation for alcohol consumption is no more than 14 units per week. If you do drink up to 14 units a week, they should be spread over at least three days.



BALANCED DIET

BALANCED DIET

About half of your diet should come in the form of carbohydrates, 20% from good sources of protein and the rest from essential fats.

Aim to eat complex carbohydrates. These release their energy slowly, which prevent the lulls in energy which can lead to unnecessary snacking. Examples of this type of food are wholegrain cereals, rice, pasta, cous cous, pulses, vegetables and fruits.

Good quality protein will help repair the body from daily wear and tear, and to repair any muscle damage caused through exercise. Good sources include all vegetables, pulses (beans, lentils, quinoa), meat (aim for white meats like turkey, chicken and fish, as they are lower in saturated fat than red meats such as beef and lamb), and soya products, such as tofu.

It is also important to eat essential fats in your diet. These come in the form of the omega oils within oily fish, such as sardines and mackerel, and from poly and mono saturated fats found in seeds, nuts and oils, such as olive and sunflower. Remember that these still need to be taken in moderation; they are high in energy and therefore calories, so only a relatively small amount is required.



FITNESS SELF ASSESSMENT

FITNESS SELF ASSESSMENT

While being able to complete the below exercises is not a prerequisite for attending the job related tests, it will provide you with the best possible chance of success. The exercises will also help to highlight any areas of weakness and allow you to tailor your preparation to address them.

The tasks require very little equipment and can be completed in most gyms or at home with a barbell set. They should only be attempted after a good warm up and you should be free from injury before carrying them out.

1. Seated barbell shoulder press – 35kg x 1 rep
2. Farmer's Walk – Barbell 35kg (dumbbells 2 x 17.5kg) held at waist height walk briskly 100 metres (Can be broken into 4 x 25 metre shuttles with no rest between shuttles)
3. Close Grip Rope Lat Pull Down
60kg x 1 rep
27kg x 10 reps
4. Deadlift – 55kg
5. Run 1.5 miles in less than 12 minutes
6. Reach a level of 8.8 on the bleep test/multistage shuttle run

PLEASE NOTE:

These exercises are not designed to be an exercise programme nor are they recommendations for an exercise plan.

Exercise Recommendations

A well-rounded exercise program includes working the three main components of fitness. These are aerobic ability, muscular strength and endurance and flexibility. All three are often daily requirements in the role of a firefighter. It would therefore be prudent to train them.

Warm Up

Always warm up before starting any exercise session. This will help prevent injury and generally prepare the body for the work ahead. A warm up should include five to ten minutes of light activity such as walking, stepping, cycling, light jogging or low intensity swimming, gradually increasing the intensity until you experience slight breathlessness and/or feel warmer.

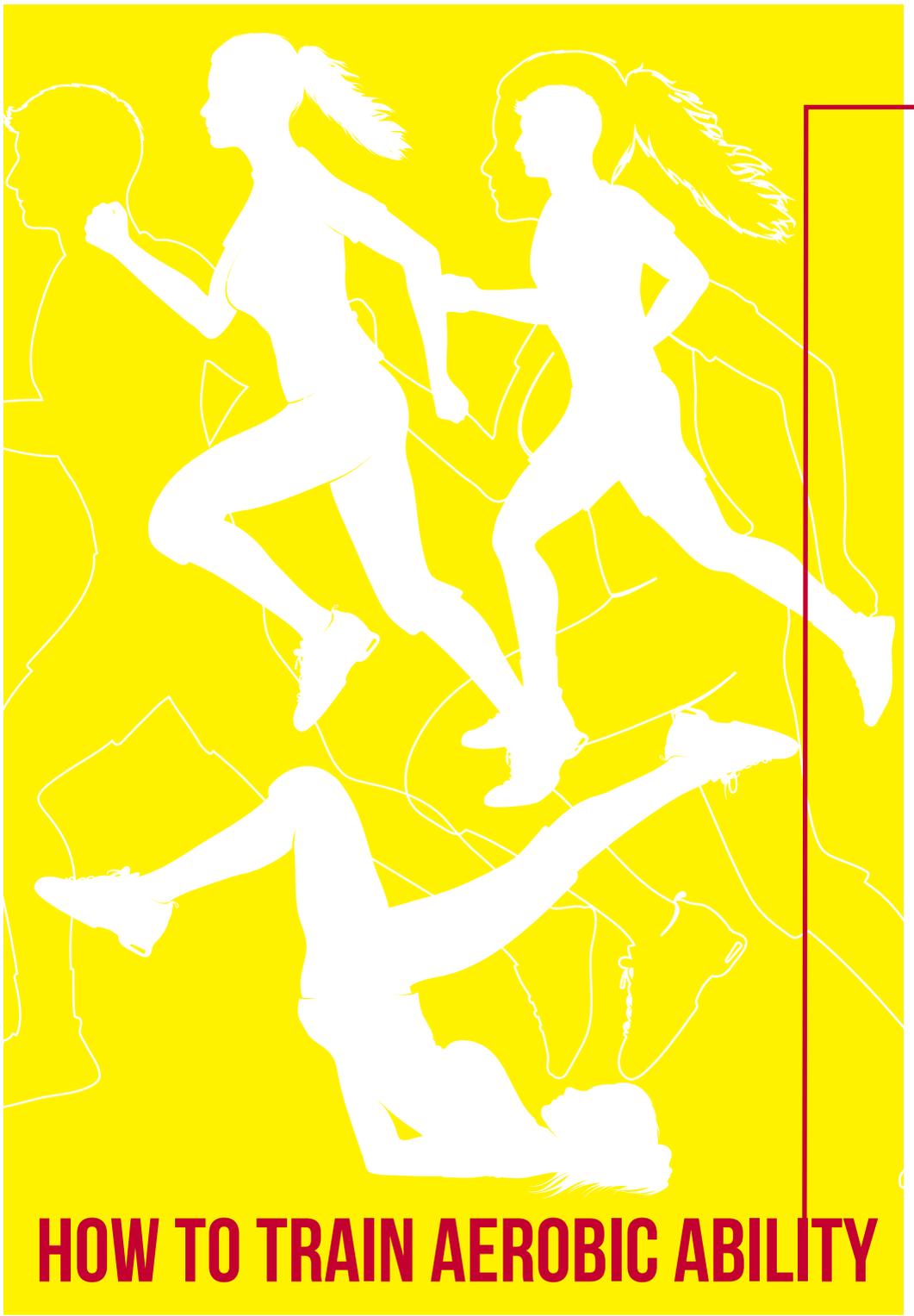
It would be wise to perform mobility exercises of your major joints, (shoulder rolls, ankle/wrist rotations, elbow/knee flexion and extension), to further prepare the joints for more intense work. Finally, it is important to stretch the major muscles. Take the stretch to a mild tension and hold it for eight to twelve seconds.

Fitness Advice

Good exercise advice is highly specific to the individual. It should be understood, therefore, that the advice provided here can only be general. It may be necessary to adjust the duration and/or intensity to suit your current fitness level.







HOW TO TRAIN AEROBIC ABILITY

HOW TO TRAIN AEROBIC ABILITY

To increase aerobic fitness, you need to perform regular aerobic exercise, training for between 20-60 minutes, three to five times per week. This type of training includes activities that are rhythmic, continuous and use large muscle groups. Good examples of these types of exercises are running, cycling, rowing, swimming, skipping, circuit classes, interval training, aerobic/step classes and dancing.

Such activities will improve your fitness, provided that a minimum effort level is sustained.



As a general rule this type of exercise should make you breathless – not speechless! The exercise should be hard but not exhausting. There are several ways of gauging the intensity of a workout. If you have access to a heart rate monitor it can be monitored accurately.

By using a heart rate monitor, you can adjust the intensity of the workout to keep your heart rate within your training zone. Training zones are worked out using the following equation.

220 minus your age = Predicted maximum heart rate (PMHR)

PMHR x 0.55 = 55% of your PMHR

PMHR x 0.90 = 90% of your PMHR

Heart Rate Table

Age	Training Zone 55% - 90% PHRM (bpm)
20	110 - 180
25	107 - 175
30	105 - 171
35	102 - 166
40	99 - 162
50	94 - 153



A Rating of Perceived Exertion (RPE) scale can be used to mentally gauge how intense an activity is. At regular intervals, try to get a feel for how hard the activity feels, then adjust the intensity to get to your chosen effort level.

RPE Scale

Level 6	20% effort	rest
Level 7	30% effort	very very light
Level 8	40% effort	
Level 9	50% effort	very light - gentle walking
Level 10	55% effort	
Level 11	60% effort	fairly light
Level 12	65% effort	
Level 13	70% effort	moderately hard - steady pace
Level 14	75% effort	
Level 15	80% effort	hard
Level 16	85% effort	
Level 17	90% effort	very hard
Level 18	95% effort	
Level 19	100% effort	very very hard
Level 20	Exhaustion	



HOW TO TRAIN MUSCULAR STRENGTH AND ENDURANCE

HOW TO TRAIN MUSCULAR STRENGTH AND ENDURANCE

As well as needing to be aerobically fit, you also carry and use various pieces of equipment. Therefore it is important to have good muscular strength and endurance. The easiest way to achieve this is in a gym environment, as you will have access to a wide range of equipment and also have the advice of a qualified fitness professional at hand. However, exercises can be performed without the use of gym equipment. Press-ups, squat exercises, abdominal crunches, lower back extensions and tricep dips can be performed simply at home. Everyday items such as filled water bottles as weights can also be utilised. When performing any exercise with weights, it is essential to use the correct technique and a slow and controlled manner.



Resistance training should include all your major muscle groups and be of an intensity that provides sufficient stimulus. This type of training should be performed two to three times per week.

Aim to perform two to five sets of an exercise and, if possible, two to three different exercises that work a muscle group. Each set should consist of eight to twelve repetitions.

At the end of each set the muscle should be sufficiently fatigued that you could not perform another few repetitions without jeopardising your technique. Rest for 30 seconds to two minutes between sets.

In a well-balanced strength training program, all of your major muscle groups need to be targeted. This will help improve posture, achieve muscular balance and help prevent misalignment and injury.

As a general rule, you should not perform resistance exercises on the same muscle groups on consecutive days. Allow at least 24 hours' rest before performing the same exercises.



Here is an example of how to structure resistance sessions:

SESSION 1

Muscle Group	Exercise Name	Set 1	Set 2
Chest	Chest Press	8 -12 reps	12
	3/4 Press Ups/Press Ups	8 -12 reps	
Shoulders	Shoulder Press	8 -12 reps	12
	Upright Row	8 -12 reps	
Triceps	Tricep Dips	8 -12 reps	12
Abdominals	Ab Crunches	Fatigue	Fatigue
Lower Back	Back Extensions	Fatigue	

SESSION 2

Muscle Group	Exercise Name	Set 1	Set 2
Legs	Squats	8 -12 reps	12
	Lunges	8 -12 reps	
	Calf Raises	8 -12 reps	
Back	Lat Pulldowns	8 -12 reps	12
	Seated Row	8 -12 reps	
Biceps	Bicep Curls	8 -12 reps	12
Forearms	Wrist Curls	8 -12 reps	15
Abdominals	Oblique Crunches	Fatigue	Fatigue
Lower Back	Back Extensions	Fatigue	



SHOULDER PRESS



UPRIGHT ROW



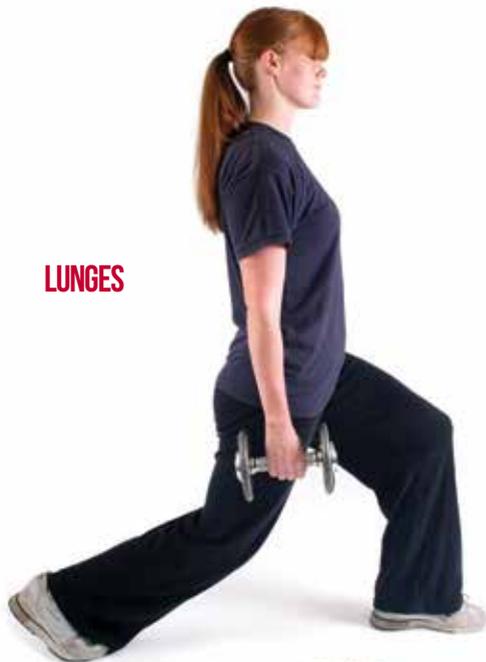
PRESS UPS



AB CRUNCHES

EXAMPLES OF STRENGTH EXERCISES FROM **SESSION 1**

LUNGES



SQUATS



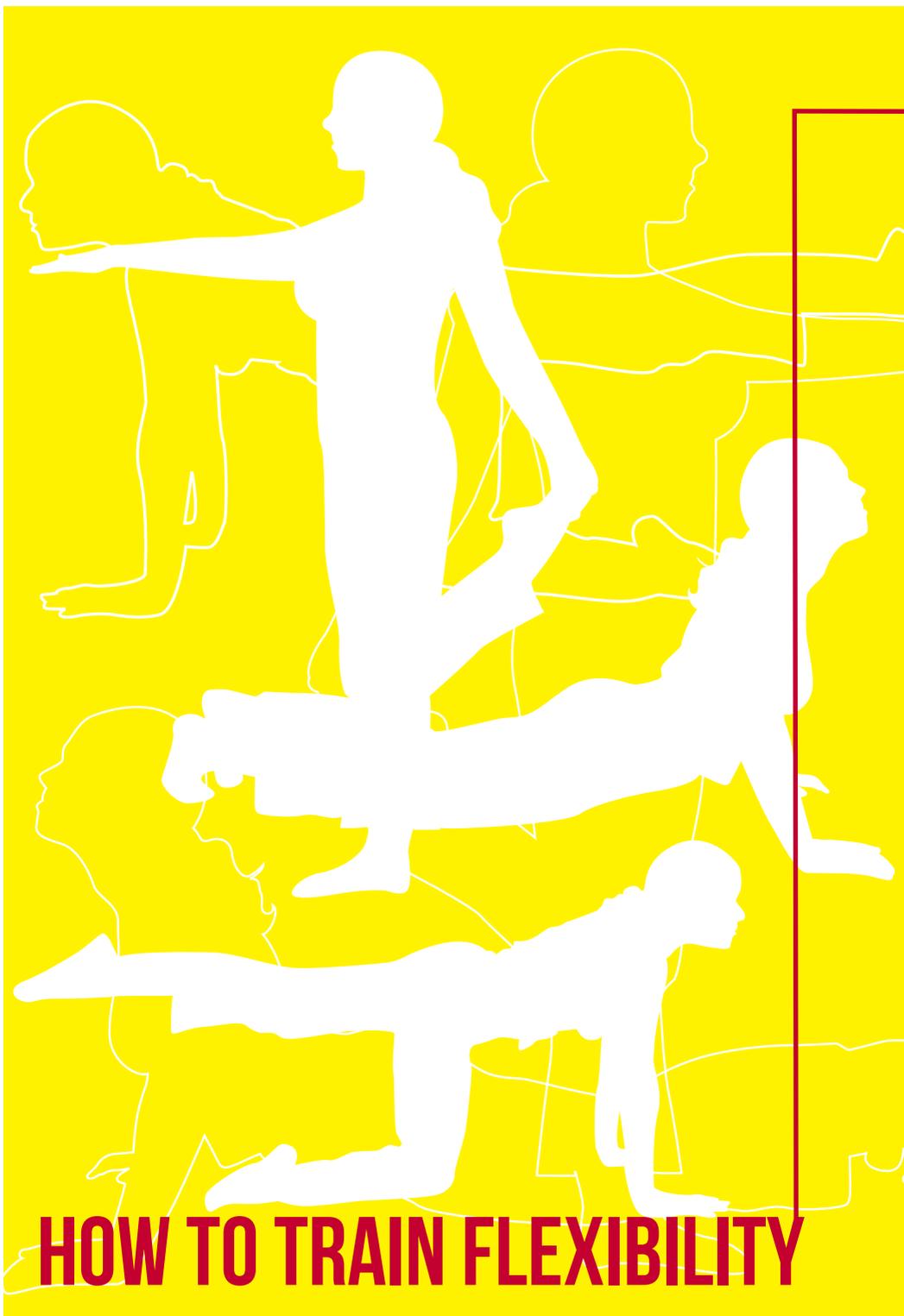
SEATED ROW



BACK EXTENSIONS



EXAMPLES OF STRENGTH EXERCISES FROM SESSION 2



HOW TO TRAIN FLEXIBILITY

HOW TO TRAIN FLEXIBILITY

This is probably the most under-worked component of fitness, and is often neglected completely. However, it is a vital component of fitness and must not be overlooked. Having a good level of flexibility is important in reducing muscular and joint injuries. It will help prevent against strains, aid in recovery after exercise and generally give you more mobility and suppleness.

Flexibility exercises should only be performed once the body is sufficiently warm. For this purpose, flexibility training should only be performed after a warm up and at the end of an exercise session. However, it can also be performed in a controlled setting such as a yoga or pilates class.

There are a number of forms of stretching techniques.

If you are new to this type of exercise, it is advisable to follow these basic guidelines:

- Stretch in a slow and controlled manner
- Avoid 'bouncing' as this can lead to injury
- Take each stretch to a mild tension, being aware not to over stretch
- Hold the stretch in a static position for 10 to 30 seconds
- Remember to breathe regularly throughout the stretch and not hold your breath
- If during the stretch, it feels as if the stretch eases, develop your flexibility by gently stretching a little further. Exhale as you develop the stretch

Primarily, aim to stretch the muscle groups that you worked during your exercise session and try to adopt a whole body approach, to benefit all your major muscles.



FITNESS PROGRAM

FITNESS PROGRAM

The eight week program on page 34 is an example of how to structure your training sessions to get a positive training effect. Your training should be gradual and progressive, starting small and building up intensity over time. This will produce an improvement in your fitness by placing greater demands on your body. To maximise the efficiency of your training you should focus on exercises that are similar to those in the entry selection tests, recruitment medical and the day to day work of a firefighter. These include running, jogging, stepping and cycling. When following an exercise program, it is important to have rest periods in between training days. This will give the body adequate time to recover before being worked again. If you miss an exercise session, do not attempt to do two sessions in one day. This can lead to over training and have an adverse affect on the body. If you are unwell or have an injury, do not exercise until you have fully recovered.

WEEK	SESSION	DURATION	INTENSITY	TIMES
Week 1	Aerobic Exercise	20 minutes	55 - 90% PHRM	3
	Upper and Lower Body Resistance sessions		2 - 3 sets of 8 -12 reps	1 of each
Week 2	Aerobic Exercise	25 minutes	55 - 90% PHRM	3
	Upper and Lower Body Resistance sessions		2 - 3 sets of 8 -12 reps	1 of each
Week 3	Aerobic Exercise	25 minutes	55 - 90% PHRM	3
	Upper and Lower Body Resistance sessions		3 - 4 sets of 8 -15 reps	1 of each
Week 4	Aerobic Exercise	30 minutes	55 - 90% PHRM	3
	Upper and Lower Body Resistance sessions		3 - 4 sets of 8 -15 reps	1 of each
Week 5	Aerobic Exercise	30 minutes	55 - 90% PHRM	3
	Upper and Lower Body Resistance sessions		3 - 4 sets of 8 -15 reps	1 of each
Week 6	Aerobic Exercise	35 minutes	55 - 90% PHRM	3
	Upper and Lower Body Resistance sessions		4 - 5 sets of 6 -12 reps	1 of each
Week 7	Aerobic Exercise	35 minutes	70 - 90% PHRM	3
	Upper and Lower Body Resistance sessions		4 - 5 sets of 6 -12 reps	1 of each
Week 8	Aerobic Exercise	40 minutes	70 - 90% PHRM	3
	Upper and Lower Body Resistance sessions		4 - 6 sets of 8 -15 reps	1 of each



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For more information on our recruitment process and fitness levels required to become a firefighter with Leicestershire Fire and Rescue Service, visit:

www.leicestershire-fire.gov.uk/recruitment

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