

# THE FULLTIME WORKER'S GUIDE TO A GOOD PHYSIQUE

APRIL 09



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*Personal Training the way YOU want it.*

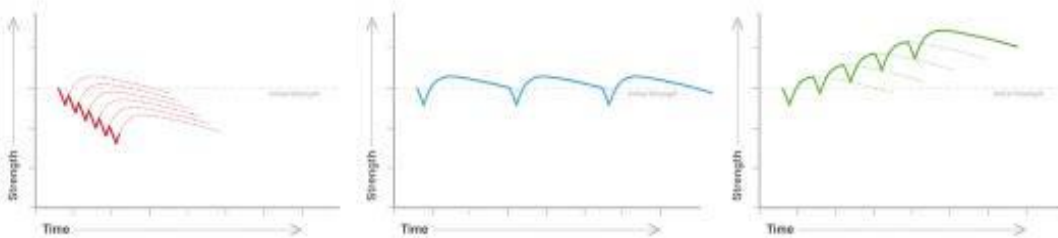


**Dominic Thorpe - Managing Director and Principal trainer.**

**DT-Training. Personal Training the way you want it.**

Now, it's important to know that post workout our bodies take a drop in strength. Muscles, connective tissue such as ligaments and tendons, and our bones temporarily weaken. Our bodies' natural response to combat this weakening is to strengthen itself. This strengthening takes place assuming sufficient recovery time is provided.

The diagrams below shows strength against time so we can see the difference between the varying training frequencies.



Too frequent (red line) and the strength gets lower and lower increasing the chance of injury. Too infrequent (blue line) and the workouts are made redundant as the body reverts back to its original strength over time. Optimal frequency (green line) will provide a gradual increase in strength over time. Note: Optimal frequency can vary depending on the fitness goal and intensity of the workout.

One thing that often leads to over training injuries is the fact that our bodies' fitness levels can increase quicker than our bodies' tolerance levels. In other words, our muscles get stronger quicker than the connective tissues, ligaments and tendons which support them. This can also be said for cardio vascular fitness levels which can increase quite quickly at first. We feel like we can do the work but our connective tissues may not be able to cope with the stress.

For training frequency advice, email [dom@dt-training.co.uk](mailto:dom@dt-training.co.uk).

# Editor's Blog

## Over training and recovery

Seeing as this edition's 'What's Your Excuse?' looks at shin splints I thought it would be wise to talk about injury prevention in general - because shin splints aren't the only over training syndrome to prevent people from exercising.

First let us define some terms.

**Adaption** - Any anatomical or physiological change in the body because of a 'stimulus' (adaption can be both positive or negative, depending on the stimulus).

**Overload** - Increasing the normal, daily 'stress' or 'stimulus' in order to induce a positive adaption.

**Recovery** - The periods between stimuli, when adaption will occur.

**Overtraining** - excessive stimulus, or insufficient recovery, resulting in fatigue, injury and a plateau or decrease in performance.

The above terms are all closely interlinked. We need overload in order to adapt (increase fitness). Adaption occurs during our recovery period and insufficient recovery allows no time for adaption - increasing the likelihood of injury.

*"One thing that often leads to over training injuries is the fact that our bodies' fitness levels can increase quicker than our bodies' tolerance levels"*

**Remember, it's still possible to train up to 6 days per week-just ensure that you vary the muscles/body parts that you work on!**



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## Camping anyone?

Promotional history has been made with the introduction of the DT Training tent. This new piece of equipment not only informs passers by that a DT Training session is taking place, inviting them to pick up a business card but it also acts as a practical means of storage during a session or as a place for people to change when coming to outdoor classes straight from work. Awesome.



## Circuits participants raise money for charity

A group of participants from Circuits on the Common put together a team and slugged it out in a charity dodgeball tournament in Hammersmith last month. The team got together in the finest fancy dress and utilized their athleticism acquired during the circuit training classes to hurl soft rubber balls at equally badly dressed opponents, earning themselves 1 win in 8 throughout the whole day. Well it's the taking part that counts, isn't it?

**"Go team!"**

## Letters mean prizes!

Last month Sarah Atkinside wrote to us with her excuses/reasons for not doing exercise and we repaid her by solving her problems in this edition and sending her a DT Training get fit pack consisting of a drawstring bag, a baseball cap and a gym towel. Email us your excuses and if your excuse gets chosen we'll solve your problem and send you a DT Training get fit pack. What are you waiting for?



## 'Circuits on the Common' revamps for Spring

For those of you that don't know about this class, it's a high intensity structured exercise class which takes place **every Tuesday at 7.30pm on Wandsworth Common**. The class has been referred to as "As good a workout as Brit Mil Fit but more fun".

It's £5 per person and finishes by 8.30pm. Make sure you bring a bottle of water! See our website for more info.

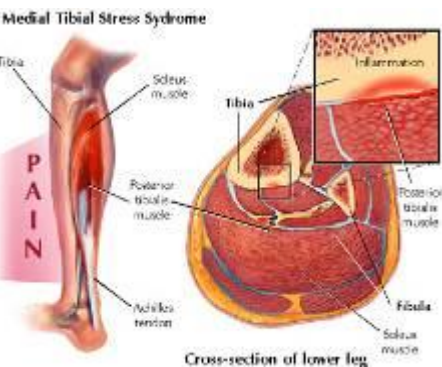


In this section we look at barriers which prevent people from carrying out exercise and how to address them with some form of realistic solution.

Thanks to Sarah Atkinside for writing to us with her reason for not exercising. Throughout this article I'll try my best to provide realistic solutions to eliminate this problem.

*"I suffer from shin splints, so I can't exercise"*

Shin splints is a condition where inflammation occurs at the shin due to stresses caused by repeated impact on the lower leg. The inflammation occurs where the periosteum (a film like sheath joining muscle to bone) is pulled away from the shin.



This condition typically occurs when an individual begins a form of exercise which stresses the lower leg, such as running, and does not gradually increase the amount of running over a long enough period or allow sufficient recovery time between runs. The result is an increase in strength and tension within the muscles of the lower leg which occurs at a greater rate than the increase in strength of the bone and connective tissues.

# What's your excuse?

Our chance to remove your barriers to exercise.



**"I shrunk my gym kit in the wash"**

## How to exercise when you have shin splints

The first rule is simple: avoid excessive impact on the lower leg. More specifically, the idea is to avoid exercises that aggravate shin splints for long enough to allow them to heal.

The exercises in the table are colour coded to advise you on which exercises can be done during what state of your recovery.

Rest	Swimming
	Resistance Training
	Handbike (not found in all gyms)
	Pilates
	Yoga
Strengthening	Recumbent Bike
	Rowing
	Cross Trainer
Progression	Running/Jogging
	Team Sports
	High Impact Aerobics
	Spin Classes / Cycling
	Skipping

The initial state being "rest" which should last for around 2 weeks, during which the green exercises can be carried out, such as swimming or high repetition circuits on full body (Resistance Training)

After the rest period is up you can start to introduce the amber exercises, such as rowing.

During this 'strengthening' period you should commence some light strengthening exercises for the lower leg. This should consist of some form of calf raises, preferably with a bent leg to target the soleus muscle (try 2 sets of 20, two footed repetitions), and follow with some light stretches performed twice a week with at least 2 days recovery between them.

Continue with the amber exercises but after 2 weeks increase the intensity of the calf raises slightly, using the same set and rep range. It's important to continue leaving 2 days recovery between workouts.





2 weeks later you should be ready to commence with a red exercise, such as cycling or jogging, in small doses. It is very important to avoid the situation you put yourself in initially by over training. Introduce the red exercises at a rate of 1 session every 2 weeks so as to allow sufficient recovery time before recommencing the activity.

### Important message

Avoid carrying out high impact exercises on consecutive days. It is possible for our bodies to tolerate this but only after sufficient long term strengthening. Those recovering from shin splints or commencing new exercise regime should always be vigilant when it comes to recovery time. I know you may be eager and enthusiastic, however you don't want to go too hard initially and have to quit training due to an injury.

*"my shin splints always come back, no matter how long I rest"*

If you have tried resting in the past and recommenced your regime once the pain has gone away to find that it returns, consider the following.

Did you perform light strengthening exercises broken by sufficient recovery period prior to your return to the regime?

Did you gradually increase your duration and frequency of training at a slower rate than you did prior to the shin splints?

If you answered no to either of those questions then you've found the problem.

Although the pain caused by shin splints will disappear after rest, the connective tissue will remain weak unless some form of strengthening exercises are carried out.

Then we must consider what caused the shin splints in the first place; too much training and insufficient recovery. If the regime was too intense prior to the injury, it's almost certainly going to be too intense post injury, therefore a softer approach must be taken.



### Still having problems?

Then give us a call at DT Training. We run 1 on 1 training sessions at a venue of your choice. Our knowledge of bio mechanics and adaptive exercise programmes not only enables us to take you through a programme that you can complete despite being injured, but it will keep you fit enough to return to the top of your game once you have recovered. Also, to combat those niggling excuses, you will have an appointment in your diary which motivates you to carry out the session.

You will certainly see and feel results.

**If the above suggestions don't work for you, or you have another reason why you're unable to exercise, email [dom@dt-training.co.uk](mailto:dom@dt-training.co.uk) - you may see a solution to your problem in the next edition!**

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# Creamy Apple, Lemon and Honey

## Muesli ...topped with Raspberries and Almonds

This recipe is great for those of you looking to eat a fuel-filled breakfast which lasts until lunchtime whilst ticking 2 boxes off of your 5 a day list. It's also wheat free!

The Tesco website calls it muesli but I consider it to be more of a super porridge. Great either way!

### Ingredients

225 g porridge oats  
300 ml cold water  
100 ml apple juice  
225 ml natural yoghurt  
3 tbsp clear honey  
Zest of 1 lemon  
2 dessert apples, peeled and grated  
Generous handful of frozen raspberries – defrosted overnight  
Handful of toasted almonds

### Method

Mix the oats, water and fruit juice together in a bowl. Cover and leave in the fridge overnight.

In the morning, stir in the yoghurt, honey, lemon zest and grated apples – top with the raspberries and almonds.

The fruit can be changed to your favourite fruit.

### Yield

4 servings

## Healthy Recipe



### Nutritional Information

Each serving contains:

CALORIES 374; FAT 10g; SUGAR 20g;  
SATURATES 1.5g; SALT 0.2g

You can reduce the calorie intake by substituting low fat yoghurt and low sugar apple juice, if you wish.

[http://www.tesco.com/recipes/brows\\_e.aspx?N=4294967203](http://www.tesco.com/recipes/brows_e.aspx?N=4294967203)





# A little bit of Science

DOMS (Achy muscles a day or two after a good workout)

We've all experienced it. Whether it be one or two days later, you can't seem to escape those aches and pains after a good work out. Some say they like the feeling as they feel as though they've worked hard. Others assume it's an injury and shy away from further exercise.

I'm talking about **Delayed Onset Muscle Soreness**, or 'DOMS' for short. A condition whereby muscles which have been worked in an anomalous fashion end up feeling tight, sore and tender to touch.

The science behind this condition is hazy at best. Several theories attempt to explain DOMS, although none are considered by the fitness industry to be conclusive or definitive. There are also suggestions as to how we can limit or avoid DOMS but again there is no irrefutable evidence to suggest that we truly can avoid it.

## Let's start by looking at the facts.

- DOMS usually sets in a day or two after the exercise and can last over a week.
- DOMS is only induced by exercise which differs from the typical activity carried out by the body.

Of the many theories which try to explain this pain, two are more popular than the rest. One of these more common theories suggests that the pain experienced is due to a build up of lactic acid remaining in the muscle days after a workout (probably because lactic acid is responsible for the burning sensation which is felt within our muscles when we train). However, finding suitable research to support this theory proves difficult.

The second, more probable, theory states that DOMS can follow unaccustomed exercise, and peaks 2 days after activity by affecting the tendon, or 'fascial', connections in the muscle. This is referring to microscopic tears in the fascia (layers of thin film-like connective tissue which encapsulate the working components within a

muscle). These are not significant enough to be considered a muscular tear but are stressful enough to induce our bodies' natural response to begin rebuilding itself to a stronger state.

## Ways to avoid, reduce and alleviate DOMS

The first suggestion claiming to avoid/reduce DOMS is "carry out an effective cool down, including stretches". The idea being that a cool down flushes all of the lactic acid out of the muscles after the work out. Now, in my personal experience, it doesn't matter how long I spend on my cool down it makes no difference to the level of DOMS experienced the next day. Potentially, this is because DOMS isn't caused by lactic acid - which would explain why this method doesn't prevent it. Another suggestion to alleviate existing pain is to perform an activity similar to the original, but at a lower intensity. Performing similar exercises activates the same muscles, sending high volumes of blood through the affected muscles, aiding recovery and promoting healing. The light intensity is intended to prevent injuries to the already weakened muscles. This method, contrary to the other, has served me well over the years and it's what I recommend to my clients when they experience DOMS.



A final method of prevention is to only workout at an intensity that doesn't induce DOMS and progressively increase the intensity to the desired level. The workouts themselves are never unaccustomed enough to shock the body, avoiding the post workout aches. However, this restricts the fitness gains made by the individual as our body only responds to significant increases in workload.

My recommendation, therefore, is to keep moving without overtraining, and enjoy the DOMS reminder that you're improving your body!

# Featured Exercise

## Dumbbell Press-up to Wide Row

This exercise is a combination exercise to increase upper body strength and core stability. It works your Chest, Upper Back, Upper Arms, and Core. You will need two dumbbells.

- 1) Holding a dumbbell in each hand, adopt a traditional press up position. Hands should be directly beneath the shoulder or slightly wider than this and the dumbbells should be positioned as if you are holding on to a straight bar.
- 2) Lower the chest towards the floor until the elbows are at 90° angles. For a more challenging workout, lower the chest to an inch or two from the ground.
- 3) Using an equal force from both arms push up until you have returned to the starting position.
- 4) Pull the right dumbbell off the ground towards the right shoulder. Engage the core muscles during this process to avoid losing your balance. The upper arm should be perpendicular to the torso once in this position.
- 5) Making sure you control the dumbbell, lower it back to the floor so that you return once more to the starting position.

From here, repeat the press up and then carry out phases 4 and 5 with the left dumbbell/arm. This entire process constitutes 1 repetition.

A typical workout may consist of 3 x 12 repetitions with a 1 minute recovery between each set. Increase difficulty with more repetitions, reducing the recovery period between sets or increasing the weight of the dumbbells.

In general increasing the weight will target muscle growth/strength and increasing the number of repetitions will increase endurance and tone the muscles.

**Can't do a press-up? Read on....**

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# Featured Exercise: Adaptations

For those that struggle with full press ups, try the press up to wide row exercise on your knees - but make sure you consult the photos below for the correct position.



## Can't do a press up at all?

You can improve your ability to do full press ups by performing them on stairs.

- In a full press up position place your hands on a step on which you can comfortably perform 10 press ups.
- Attempt to perform 3 sets of 10 every 2 or 3 days.
- Once you can comfortably complete 3 sets of 10, try to do it on the step below.
- Continue this process every 2 or 3 days, being sure to progress to the step below once you've achieved 3 sets of 10.

...eventually you'll have worked your way down to the floor!

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New Website!  
www.dt-training.co.uk

## DT-Training

What we do... and what's in it for you!



## Credit Crunch?!

Check out our offers to see how we can help you look fine in 2009, *without breaking the bank...*

*Try before you buy...*

At DT-Training we'll give you a personal training session for free before you decide to make your purchase.

*Two train for the price of one!*

At DT-Training we charge our standard hourly rate, no matter how many there are of you. How generous is that?



## Free Sessions!

When buying in bulk we'll reward you with **a free session for every 5 sessions purchased**. After all, you should have some kind of reward for your efforts, don't you think?

## Extra Services

### *Personal Programmes*

At DT-Training we'll provide a 12 week personalised programme which targets your goals by varying considerably over the 12 weeks and containing 2 to 3 weekly session cards. We'll also spend an hour with you going through the programme to ensure that you carry out the techniques in the correct manner.

...after that it's up to you!

### *Circuits on the Common*

Why not compliment your 1 on 1 session with one of our weekly circuit training sessions. They're fun, sociable and they'll get you really fit!

The sessions are £5 each week, no monthly fee and they suit every level of fitness – it really is the taking part that counts!

**Tuesdays 7.30pm – 8.30pm, Wandsworth Common**

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