

Research for cw2

As a trainee dancer it is important for us to realise our strengths and weaknesses within fitness, nutrition and psychology This coursework evaluates the importance of the weaknesses I have found within these three elements, why they are important, what a lack of them can effect and how I will improve them.

Element	strength	weakness
Fitness	cardiorespiratory endurance	Muscular endurance
Nutrition	Balanced diet	Hydration
Psychology	Memory	Sleep

Plank test

The plank test involves being in the correct plank position (see appendix 1) and timing how long you can hold it for (see appendix 2)

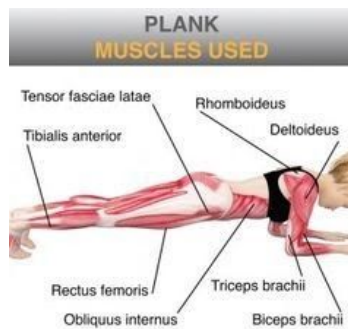
Results for the plank test: Front- 1 minute

According to the grid below of normative data, i come under the section of improver.

I would like to work towards being in the section of advanced as core strength and stamina is highly important for a dancer as it helps with such things as dancing for long periods of time and balance.

Age	Gender	Beginner	Improver	Intermediate	Advanced	Expert	Pro
18-35	Male	0-40	41-90	91-125	126-160	161-190	191+
	Female	0-30	31-60	61-90	91-130	131-160	161+
36-44	Male	0-35	36-70	71-105	106-150	151-180	181+
	Female	0-25	26-50	51-80	81-120	121-150	151+
45-54	Male	0-25	26-50	51-95	96-140	141-170	171+
	Female	0-20	21-45	41-75	76-130	131-140	141+
55+	Male	0-15	16-40	41-70	71-130	131-160	161+
	Female	0-10	11-30	31-60	61-120	121-130	131+

Holding plank regularly has a high amount of benefits such as improving posture, coordination and metabolism. It also works a lot of muscle groups such as the back, shoulders, neck and abs. See image below for extensive list of muscles activated during plank.



To hold plank for longer other exercises can be done to strengthen the muscles necessary. For example, sit ups, crunches and hip ups improve core strength which will help you to hold plank for a longer period. Press ups will help to strengthen your arms such as the triceps which will also benefit holding the plank position.

(See appendix 3)

Each day aim to partake in exercises that will help to prepare you for plank and at the end of the work out hold plank for the longest possible time and take note of how long that is, keep a table of how long therefore you can see if you are improving or not. To make plank more challenging alternate lifting different limbs such as each leg and arms and then alternative one arm and one leg (see appendix 4)

By doing different variations of plank it will help to strengthen other muscles, for example by doing side plank it works the external obliques and adductors (see appendix 5). Reverse plank activates obliques, gluteus maximus and hamstrings (see appendix 6).

Hydration

Hydration is the process of causing something to absorb water. Being hydrated is a necessity of life for everybody, however it is especially important for those who

partake in high intensity exercise and activities as they are likely to lose a higher amount of water due to sweat.

The volume of fluid needed for each person is dependent on weight, size and activity level, however, the general recommendation is 2 litres per day

Different liquids have different effectiveness of hydration, for example, milk and orange juice are good sources of hydration as well as oral rehydration solution; these are solutions that are specifically designed to cause fluid retention and contain high levels of sodium and potassium. Drinks that are not good for hydration include caffeinated drinks such as coffee and dehydrators such as alcohol.

Dehydration can lead to serious health issues due to the body relying on water for most of the processes it carries out each day. Lack of water could lead to overheating, especially in hot conditions and/or if someone is partaking in high intensity activities, overheating could lead to cramps or more severely heat stroke which could be very dangerous. The kidneys can also be affected by lack of water with such problems as kidney stones, UTI's, kidney damage and even kidney failure. A high level of dehydration could even cause seizures and, in the long term, lead to strain on the heart.

It is quite easy to notice the symptoms of dehydration as they include visible signs such as dark urine (see appendix 7) and dry mouth. Feeling lightheaded or dizzy can

also be a symptom of dehydration along side feeling thirsty (if you feel thirsty you are already dehydrated) and tiredness.

For people who regularly do intense physical activity sports drinks might be a valuable option for part of their fluid intake (see appendix 8).

There are many ways in which someone can improve the volume of their fluid intake. By setting a goal of how much fluid you wish to consume that day, it can help you feel motivated to achieve the target, track the progress throughout the day to keep you on target. Set reminders on your phone, smart watch or whatever is accessible to you personally to drink at least every 30 minutes this way even if you have a very busy stressful day you will not forget to drink. Take a reusable water bottle with you throughout daily life therefore fluid is available no matter where you are. Aim to drink a glass of water before/with each meal and eat foods with high water content such as: soup, melons or celery. To make water more appealing, naturally flavour the water with fruit such as lemon, cucumber or strawberry, the flavour may result in you wanting to drink it rather than feeling that you are forced to.

Aim to drink the recommended 2 litres per day by keeping a table or get a health app on your phone to record how much fluid you are intaking. By getting a litre sized bottle it will be easier to keep track of how much you have drank that day.

Sleep

Sleep is a necessity for normal function of the human body. Young adults should aim to get between 7 to 9 hours of sleep a night.

Sleep is very important as it contributes to many parts of the body and life. It can boost your immune system making you less likely to get ill, as well as improving mental wellbeing. More sleep helps to make you more concentrated and productive, this can also maximise athletic performance. Physical health benefits include less weight gain and prevention of type 2 diabetes.

A lack of sleep could be caused by many different reasons such as; an unsuitable temperature, drinking caffeine too close to the time you wish to sleep, noise or stress, anxiety and/or depression. Working times such as working different shifts could affect the level of sleep you achieve as well as travelling- jet lag.

A lack of sleep could lead to a range of health issues from less serious ones like being irritable, anxious and feeling down to more severe, such as, increased risk of cardiovascular disease. It can affect how you deal with everyday activity as the lack of concentration caused by lack of sleep could lead to a higher risk of injuries and accidents. Lack of sleep can lead to physical issues such as weaker immune system resulting in a longer recovery time from illness and obesity. It can also affect the body's hormone production, fertility levels and reduce social skills.

There are many ways to help improve the quality and length of sleep you get.

External environmental factors may contribute to a lack of sleep, therefore by having

a cool, dark room with a comfortable bed the possibility of sleep may be greater.

Routines are very effective when trying to sleep. Avoid alcohol, caffeine or drug use at least 6 hours before going to bed, as well as eliminating screen time prior to bed.

Create a regular pattern of sleep by trying to go to sleep at the same time each night and waking up at the same time each morning, do not take naps as this will affect how much you can sleep at night.

Make a note of what time you went to sleep, if you woke up during the night and what time you woke up in the morning. Keep a track and plan to go to sleep with enough time to get 7 to 9 hours per night, go to bed early if you know you have to be up early in the morning. There are many apps that can track when and how well you sleep therefore it may be beneficial to download one of these apps.

To conclude, the weaknesses I have found that I need to improve are highly beneficial when corrected, therefore, I will aim to improve these issues with the research I have done about ways in which you can improve each weakness and the action plan that has been made, which will, in the long run, result in a more efficient lifestyle.

Appendix

Appendix 1-

TO HELP ENSURE YOU'RE READY FOR THIS SUPER PLANK HOLD CHALLENGE OF CHALLENGES, HERE'S THE QUICK FUN ABS VIDEO OUTLINING PROPER PLANK TECHNIQUE. MAKE SURE YOU MASTER A PLANK BEFORE YOU ATTEMPT THE PLANK TEST.



So there you have it!! Everything you need to test your core strength and make sure you plank properly. Now go forth and engage that core!!



The Plank Test

How strong is your core? Whilst a few have an indication from being able to see their abs and core muscles, many of us have a bit of podge on top hiding it. So how exactly can you tell your core strength?

The Plank Test is a great way of understanding and benchmarking your core strength. It's simple and easy (if tiring - but otherwise it wouldn't be a test!!) to do.

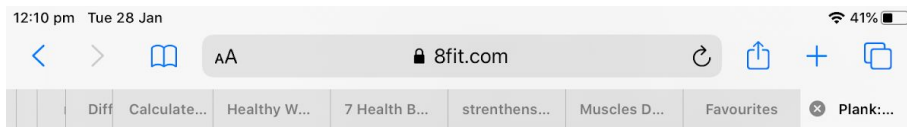
PLANK HOLD CHALLENGE TEST PROCEDURE:

Have someone (that understands proper plank form) time your plank using a stopwatch or mobile phone. Timing should start as soon as you are in a proper plank position, with the time stopped at exercise failure. This is subjective but it is suggested when it is not possible to hold a plank with *'good form'*.

That's it!! Once the test is complete, compare your plank time to the Plank Test Chart below and see how your core strength ranks against your age and gender.

KEY POINT: MAKE SURE YOUR PLANK TECHNIQUE IS STRONG. NO CHEATING!! TO CHECK THAT YOU HAVE PROPER PLANK TECHNIQUE WE'VE INCLUDED OUR HOW TO PLANK VIDEO AT THE BOTTOM OF THIS ARTICLE.

Plank Test Chart



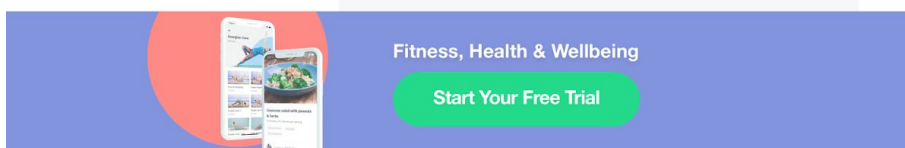
How to hold your plank longer

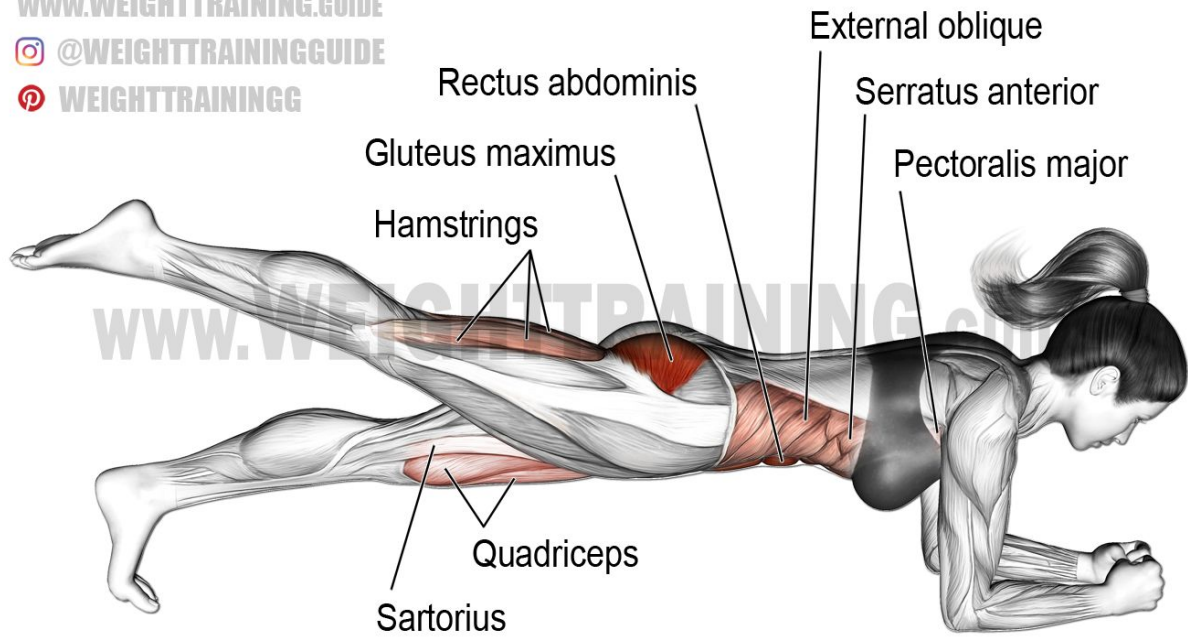
One big question I'm asked is, "*How long do you hold a plank?*" While there is no correct answer to that question, I advise starting with 30 seconds, then work your way up to one minute. The more you practice it, the longer you'll be able to hold.

You can also improve hold time by strengthening the different muscles recruited when you do a plank. Here are some exercises that'll help increase your muscular strength and endurance in those muscle groupings:

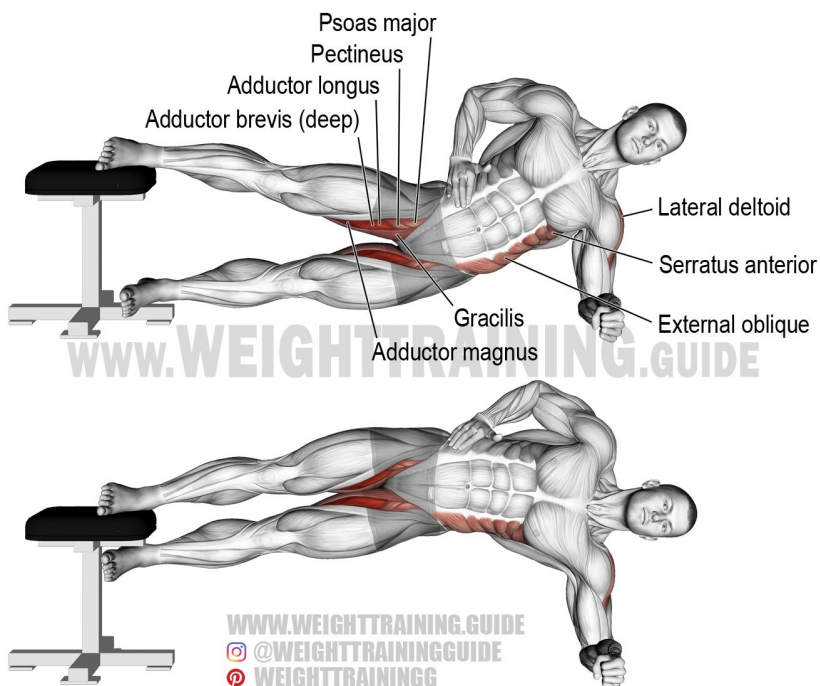
- Sit ups and crunches (any variation)
- Hip-ups (any variation)
- Lower back extensions (any variation)
- Leg lifts (any variation)
- Push-ups (any variation)

Next time you see a plank in your 8fit workout plan, keep all of my cues and suggestions in mind. If you aren't feeling strong, add the exercises above to your fitness routine and you'll be planking like a pro in no time.

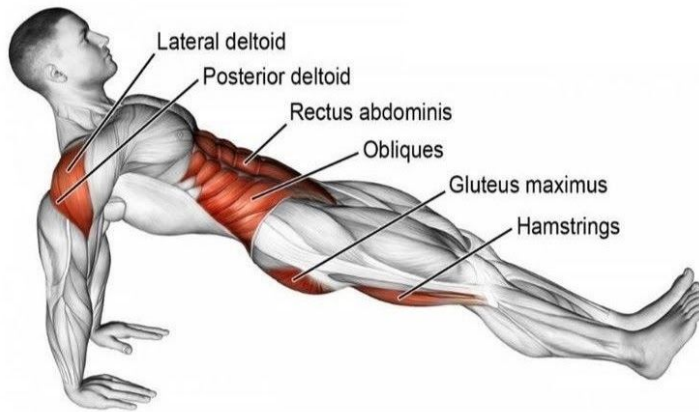




Appendix 5-



Appendix 6-

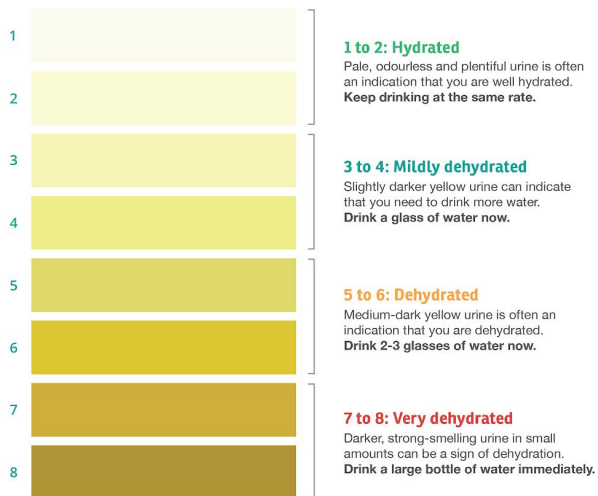


Appendix 7-



Am I drinking enough water?

Use this urine colour chart to assess how hydrated you are. It is important to drink plenty of water every day to stay healthy.



What can change the colour of my urine?

Certain foods, medications and vitamin supplements may change your urine colour even if you are hydrated.



Important

The colours on this chart should only be used as a guide and should not replace the advice of a health professional. Speak to your doctor if you are worried about the colour of your urine, the amount of water you drink or dehydration.

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Appendix 8-



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Sports Drinks Can Benefit Athletes

The main components of sports drinks — water, carbs and electrolytes — are each important for different aspects of exercise performance.

Water and electrolytes are lost in sweat, and it's important to replace them, particularly during long-duration exercise ([10](#) )

Your body stores carbs in your muscles and liver called glycogen, which is used for fuel during exercise ([11](#) )

Consuming carbs before or during exercise can help slow down how quickly your body runs out of its own carbohydrate stores ([10](#) )

Sports drinks are designed to provide these three important ingredients with the goal of improving exercise performance or recovery ([8](#) )

Many studies have examined the effects of sports drinks on exercise performance, and much of this research has been conducted in athletes.

Short-Duration Exercise

It's not fully clear if sports drinks are beneficial for short-duration exercise.

One report examined nine studies of intense cycling or running lasting 30–60 minutes ([6](#) )

Six of the studies showed that sports drinks benefited exercise performance. However, all participants were trained athletes performing intense exercise.

One study in trained cyclists found that a sports drink improved performance by about 2% during one hour of intense cycling, compared to a placebo ([12](#) )

Despite these findings, there is not strong evidence to support the benefits of sports drinks for short-duration activities, such as jumping, sprinting and agility exercises ([13](#) )

Similarly, clear benefits have not been demonstrated for weight training ([14](#) , [15](#) )

Team Sports and Intermittent Exercise

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