# Science Simplified – Book 2

# The Cortisol Code

This Stress Hormone Is Called Stubborn Fat's Best Friend... But Is It?

A Tetrogen Publication

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# **Prologue**

# Welcome To The 'Science Simplified' Series

In this series we deconstruct the science behind different metabolic hormones for you.

And not just any metabolic hormones...

We'll focus on the hormones, signaling molecules, and peptides that have a direct effect on your body's fat storage.

You won't need a degree in biology.

You won't even need a basic understanding of science.

We created this series to reveal complicated nutrition science in a way that even a 12 year old would understand. We're going to skip the complicated concepts and focus on what's important:

Simple information you can take and start using today to lose body fat quickly and sustainably.

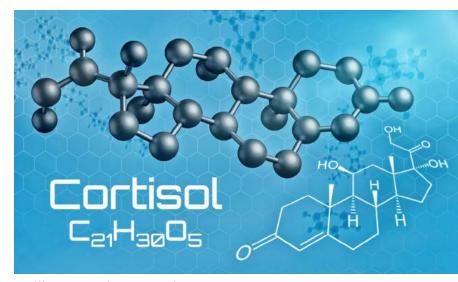
If you're looking for more advanced scientific concepts, this isn't the book for you... but if you don't care about the science – only the practical steps and information you need to lose weight smarter – this series is perfect for you.

And if you're craving even simpler, evidence-based information

on hormones & optimizing them to lose weight, you can request a copy of our Free E-Course – just go to www.Tetrogen. com/optin

# Chapter 1

# Cortisol - The Stress Hormone



We'll get into the practical steps you can use to optimize your cortisol levels for weight loss momentarily. But first, you need to have a basic understanding of cortisol and how it functions inside your body.

# What Is Cortisol?

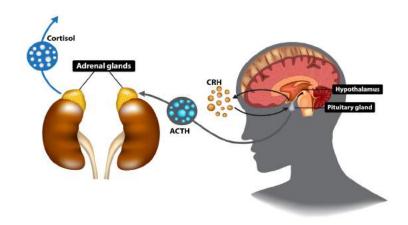
Cortisol is a steroid hormone released by your adrenal glands. It's often called your body's "fight or flight hormone" – it helps your body react and adapt to stress. The sudden release of cortisol, during a situation that threatens us, creates a rapid release of sugar and fat into the bloodstream – this rapid shot

of energy gives us the fuel needed to either "fight" the stress or run from it...



...at least that's how it evolved in nature. Nowadays, cortisol is less likely to be released during a period of sudden danger and more likely during the standard, day-to-day stresses we encounter at home or at work.

But cortisol isn't just released when we're in danger. Every morning, before we wake up, cortisol is released into the blood stream. This sudden rush of cortisol helps us wake up. Over the course of the day, levels drop until the next morning where the cycle continues.



# Fat Gain Hormone, Fat Loss Hormone... Or Both?

If you read book 1 of this series, on Leptin, you'll remember that it was a very confusing hormone. For some people, more leptin helps them lose weight and for others, less was better.

Unfortunately, cortisol is no less confusing.

See, depending on the state of your body, cortisol can cause you to gain or lose body fat. It also depends on the hormones it interacts with – cortisol alone works differently than when it's exposed to other hormones.

What does matter is this: if you're stressed out, especially chronically, your cortisol levels are probably high... and it most likely leads to weight gain.

# What Are Cortisol's Positive Effects?

We have it in our bodies for a reason. Cortisol is an important hormone for our daily body functions.

### Those benefits include:

- Proper metabolism of sugars
- Helps you burn more fat during exercise
- Manages your blood pressure
- Supports immune function
- Regulates a healthy inflammatory response

And outside of the body's daily cortisol cycle, quick bursts of cortisol during stressful situations can provide some benefits.

### These benefits include:

- Rush of energy to ensure survival
- Reduced sensitivity to pain
- Sudden increases in immune strength
- Improved memory retention

### **Chronic Stress & Cortisol**



If you've heard of cortisol before this book, a lot of what you've been told is probably negative.

But, as you can see, cortisol isn't such a black and white hormone. Sometimes, it can help you lose fat and other times it's weight loss' worst nightmare.

Everything negative you've heard about cortisol, is most likely about *chronically elevated* cortisol and chronic stress.

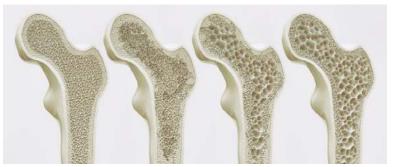
When you have chronic stress, you don't experience the normal, healthy cycle of cortisol each day. Levels are always high. Your body never properly enters the relaxation mode that normally follows a stressful event. Even worse, your organs and tissues become desensitized to many of the positive effects of cortisol.

These chronically-high levels of cortisol cause a cascade of negative health effects, including:

Reduce memory and brain function



- Increased feelings of hunger
- Increased cravings (especially fat & sugar)
- Insomnia
- Decreased bone density



- High blood pressure
- High blood sugar
- Lead to excess fat gain (particularly around the waist)
- Slows metabolism via blocked conversion of thyroid hormones
- Weakens your immune system

Clearly, chronically high cortisol is the last thing we want – especially if we're trying to burn body fat.

And it's not a singular condition.

First you have high cortisol, which leads to insomnia and high blood sugar. Then after a few months, these symptoms lead to imbalances of other hormones like leptin & insulin. Like the domino effect, these two impact your other metabolic hormones. Before you know it, all your metabolic hormones are out of balance and you have no idea how to fix them.

This is why we cover multiple hormones in this series – a

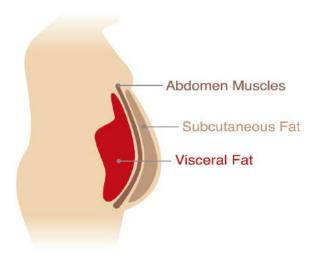
singular hormone imbalance may have caused the weight gain in the first place, but you need to balance ALL of them if you want to get back to a healthy, attractive body.

# The Worst Part Of Chronically High Cortisol

As if the fat gain and negative health effects wasn't enough, chronically high cortisol levels have 1 more critical negative effect.

Even if your body isn't in a state where it can store the food you eat as fat, the cortisol is still working. Cortisol can cause your body to redistribute your fat.

You have 2 types of fat; visceral fat and subcutaneous fat.



Subcutaneous fat is found all over your body and it's relatively easy to burn. But visceral fat is the fat deep inside your abdomen. It's the fat that surrounds your organs, causing that ugly 'baby-bump bloated' look. It increases your risk of heart disease and diabetes.

Worst of all, visceral fat can manufacture and release even more cortisol into your bloodstream – unleashing a vicious cycle.

The good thing is, when you first reduce your cortisol levels, these so-called "stubborn fat stores" become a lot less stubborn.

# How Can You Use Cortisol To Help You Burn Body Fat?

Luckily, balancing your cortisol levels is quite easy. In the next chapter, we will go over a 3 step system you can use to optimize your cortisol levels. This transforms cortisol from a craving and fat gain monster – the enemy preventing you from reaching your weight loss goals – into your friendly, helping hand for weight loss.

# **Chapter Summary**

- 1. Cortisol is a hormone with a healthy day/night cycle. It helps wake you up in the morning.
- 2. Cortisol levels spike when we are stressed, releasing the energy necessary for a fight or flight response.
- 3. Cortisol is a healthy and important hormone it can even help you lose weight under certain conditions.
- 4. Only when chronically elevated usually due to stress does cortisol cause stubborn fat gain (particularly around the waist).
- 5. These deep abdominal fat stores can create their own cortisol; unleashing a vicious cycle.
- 6. The symptoms of high cortisol can throw other hormones out of balance as well just fixing cortisol levels may not be enough.

# Chapter 2

# 3 Steps To Use Cortisol For Weight Loss

In the following chapters of this book, we will cover diet, lifestyle, exercise, and supplementation to optimize your cortisol levels.

First, we have to understand when we want cortisol and when we don't...

We want cortisol present:

- In the mornings, immediately after waking up



While you exercise

We don't want cortisol present:

- While eating a fatty/sugary meal
- In the afternoons and before bed
- When tissues have become desensitized to cortisol

You will use the tips we cover in the following chapters to complete 3 steps.

# Step 1 – Reduce Serum Cortisol Levels

# Step 2 – Implement Strategies To Burn Stubborn 'Visceral' Fat

# Step 3 – Strategically Increase Cortisol Levels At Specific Times

As we cover these methods to restore your healthy cortisol levels, eliminate stress, and reduce stubborn belly fat, we'll discuss how each method fits into these 3 steps.

In the final chapter of this book you'll find a quick section covering the methods which fit into each step, so you can make quick choices that fit within your current lifestyle.

# Chapter 3

# Reduce Cortisol Levels With A Healthy Lifestyle

It doesn't take a genius to realize that one of the best ways to reduce this stress hormone's presence in our bodies is by reducing stress.

But that's easier said than done. Life is inherently stressful. Work, finances, taking care of the kids – all of these things stress us out and allow cortisol to thrive.

Many of us can't reduce the stressors in our lives, but we can allow our bodies to handle this stress better. Stress has existed since the birth of humanity. And, just like stress itself, there are some millennia-old techniques you can use to fight stress and reduce your cortisol levels – they're even backed by modern day science.



### Mindfulness Meditation

The earliest written record of meditation being practiced is over 3,500 years old – some scientists think it was practiced as early as 1,000 years before that.

It was long considered useless by the scientific community until recent studies were finally done on the brains of the world's greatest meditators.

Results were alarming.

Pain-reduction receptors in the brain were activated as strongly as people on prescription opioid pain-killers. Thousands of genes showed incredible differences from people who didn't meditate – many of which science doesn't even understand yet.

There's a long list of discovered benefits of meditation (and even more undiscovered ones), and one of those benefits is reduced stress, anxiety, and cortisol levels.

Meditation can seem like a complicated, difficult practice, but I promise you'll be surprised. Try it for a week and you'll be hooked.

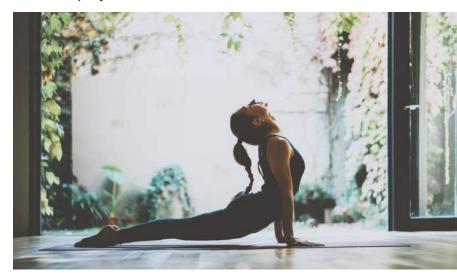
Simply meditating for 10 minutes per day can do wonders for both your perceived stress and measurable blood cortisol levels.

If you are interested in trying mindfulness meditation, you can learn the basics <u>here</u>.

# Yoga

Yoga has exploded in the fitness industry, and dozens of new types and methods come out every year. But, we have to look at yoga's roots.

You see, yoga originally was not just a fitness activity; it was a 3 sided lifestyle practice.



- Physical practice what we know & think of as yoga
- Mental practice forms of meditation
- Spiritual practice chanting, prayer, and spiritual study

If you look at more tradition-based forms of yoga, like Iyengar Yoga, you'll be hitting two birds with one stone. You'll undergo different types of physical yoga practice, alongside meditation. Instead of learning meditation on your own, you'll be guided directly by experienced practitioners who've dedicated their life to the power of yoga & meditation.

And if you don't want to try it in a class setting?

That's fine as well, let's keep it simple. You can put together a small, 20 minute routine by spending 4 minutes in each of the following beginner poses:

1. Child's Pose over a bolster or blankets

- 2. Viparita Karani Legs on wall, lower back on bolster or blankets
- 3. Supta Baddha Konasana Reclined Bound Angle Pose
- 4. Jathara Parivartanasana Revolved Abdomen Pose
- 5. Savasana Corpse Pose

You'll have to spend a bit of time researching the form on these – we chose them because they're extremely simple and very forgiving on your body if you make a mistake.

# Sleep

If you read every book in this series, sleep will be the one thing you'll find in common between all of these hormones.

Bad sleep habits are the enemy of fat loss and good health. Studies on sleep deprived people have discovered significantly higher levels of cortisol in their blood. Even worse, the levels were often highest in the afternoons and evenings – the worst time to have cortisol present.

Luckily, there's a simple fix.

Get. More. Sleep.

The whole "8 hours a night" rule was popularized by TV doctors.

Instead we'd suggest figuring out what YOUR ideal sleep habits are. How long do you wake up naturally, feeling well-rested, after? For some people it could be 9 hours, others 6 hours.

Try to keep your sleep schedule consistent, while getting no less than 1 hour below your ideal sleep length.

If you have trouble falling asleep at night, try a low 1mg dose

of melatonin before bed. It's a completely natural supplement and it won't interfere with your sleep patterns. Avoid doses higher than 1.5mg as they could leave you feeling groggy in the morning. You'll also find a dose of melatonin in our <u>Tetrogen Hormone-Optimizing Night Formula</u>.

# **Chapter Summary**

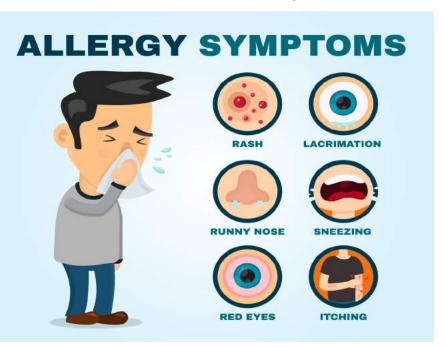
- 1. Controlling your lifestyle is an effective way to reduce cortisol levels.
- 2. Reducing exposure to situations that lead to chronic stress is an effective measure.
- 3. Use meditation and yoga to help cope with stress better while reducing your cortisol levels.
- Keep your sleep habits consistent and make sure you're getting enough rest each night. With bad sleep habits, fixing your cortisol levels will become much more difficult.

# Chapter 4

# Stress & The Food You Eat

Unfortunately, there aren't any foods you can eat to help lower your cortisol levels.

What this chapter is about is making sure you don't have any foods that cause your body to react by releasing cortisol. These would be foods you have a hidden allergy or sensitivity to.



Allergy tests are easily available if you ask your doctor, but food

sensitivity tests are a different story. While they do exist, there's no scientific evidence to show they're effective.

To test for food sensitivities, you can do something called an elimination diet, where you immediately remove a list of common food sensitivities from your diet. After 2 weeks, you begin to reintroduce these foods to see how you react to them.

The typical foods eliminated, then re-introduced, are:

- Sugar
- Dairy
- Wheat & Grains
- Soy
- Corn
- Gluten
- Pork
- Eggs
- Seafood
- Nightshade Vegetables
- Citrus fruits

After the 2 weeks are up, introduce each food, one at a time, every week. Look for different feelings or new symptoms appearing after the reintroduction of a food and now you've discover what food is triggering a reaction within your body.

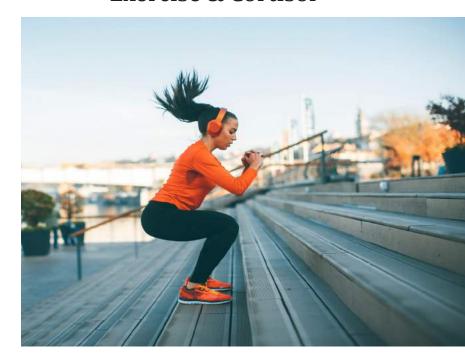
# **Chapter Summary**

1. There aren't any foods you can add to your diet that will have a major impact on reducing your cortisol levels

- 2. Instead, you must search for food sensitivities and allergies things that trigger a stress reaction in your body after consumption
- 3. Try an elimination diet to discover if you have any food sensitivities.

# Chapter 5

# **Exercise & Cortisol**



Exercise is an interesting exception to the rule that we want to reduce cortisol levels. We want MORE cortisol when we exercise.

That's not a problem since exercise is stress – physical stress. Most forms of somewhat intense exercise release cortisol. This helps your body adapt to the workouts, burn more fat, and make faster progress.

But not all exercise is created equal...

When trying to maximize cortisol levels during workouts (to help us burn more fat), we need to up the stress level – this means upping the intensity.

The more intense the exercise the better.

That means no long hours of cardio and no long walks on the beach. You'll be tired and you'll be sweating.

My 2 favorite forms of exercise for burning body fat with a big cortisol boost are:

# **High Intensity Interval Training (HIIT)**



While this is technically cardio, it's much more intense and takes significantly less time than traditional cardio – in fact, the average workout should be 10-20 minutes.

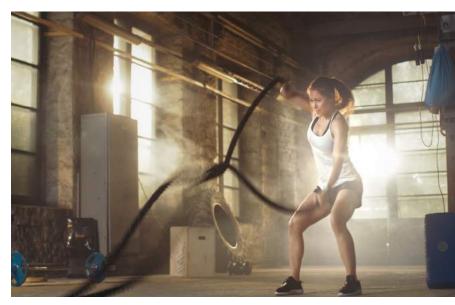
It's all based on heart rate.

You calculate your maximum heartrate, then try to reach at least 80% of that number during each sprint. The sprints go on for only 15-30 seconds, followed by a break of 60-120 seconds where you go at a snail's pace. Repeat these 80% heart rate sprints 10 times and you're done. It's a tough workout, but it's amazing for improving the appearance and composition of your body.

These 'sprints' don't necessarily need to be running – any type of cardio where you can reach extremely high intensities will work. Biking, running, swimming, rowing, etc all work great.

You can calculate your maximum heartrate by subtracting your age from 220. IE. If you're 46 years old, your maximum is 174 beats per minute. That means you want to reach at least 139bpm during each 15 minute sprint or your intensity isn't high enough.

# **Resistance Training**



Adding a few full-body weight lifting sessions each week is an amazing and underrated way to lose weight and improve the look of your body – especially for women.

And, unsurprisingly, you get a huge spike in cortisol from these full body weight lifting sessions.

We could write a whole book on resistance training, but here's what's important:

- Focus on heavy compound movements that use many muscles at once.
- Stick with barbells primarily, with dumbbell and cable accessory work.
- Do full body routines with at least a day of rest in between sessions. Avoid single-body-part workouts (back, arms, legs, etc)

We go more in depth into the subject of resistance training inside our Hormones & Metabolism Course – go to <a href="https://tetrogen.com/optin">https://tetrogen.com/optin</a> to get your copy, free.

### **Cortisol Levels After Exercise**

We want our cortisol levels high during exercise, to help us lose weight, but what about after we finish our workouts?

Cortisol levels remain high and slowly go down throughout the day. That's fine if you work out within a few hours of waking up, but what about people who work out in the evenings or afternoons?

Don't worry, you can continue to exercise when it fits into your schedule best, but you'll have to make an active effort to reduce your cortisol levels after.

There's 2 ways to do this: post-workout meal and supplementation.

We will cover supplementation in the next chapter, so let's talk diet.

A large meal right after your workout is great for recovery and will drop off your cortisol levels. Make sure the meal is packed with proteins and carbohydrates rather than being too fatty – now's not the time for fried foods.

# **Chapter Summary**

- Elevated cortisol during workouts helps you burn more body fat
- 2. The higher intensity of the exercise, the more cortisol you release
- 3. The best forms of exercise to maximize cortisol are HIIT and full body weight training.
- 4. Weights won't make you bulky, even if you're a woman.
- 5. 2-3 HIIT and/or weight training sessions, total, per week is ideal.
- 6. Make sure you have at least 48 hours in between workouts.
- 7. If you work out more than a few hours after waking up, eat a carb & protein rich meal immediately afterward to drop cortisol back to normal levels.

# Chapter 6

# Use Of Supplements To Supress Cortisol

Supplementation is one of the most effective ways to immediately and measurably lower your cortisol levels. In fact, some people with high cortisol find they only need to use supplementation in order to reach healthy cortisol levels.

Just taking a pill sounds easy enough, but remember that it's generally best to try lifestyle and diet methods first, and supplements after you've exhausted those options.

Most supplements we're about to go over are called 'Adaptogens' – they help our minds and bodies adapt to the stress we encounter in day to day life. Some adaptogens just reduce the amount of stress and anxiety we perceive, but not necessarily our actual blood cortisol levels. The following supplements are clinically-shown to both reduce the extent to which stress affects you, alongside a substantial drop in cortisol levels.

# **Ashwaganda**





This ancient medicine, used in Ayurveda for thousands of years, is definitely the most bang you'll get for your buck when it comes to lowering cortisol and stress.

Studies have found a 27.9% decrease in cortisol after just a few weeks of supplementation – the people in these studies were healthy too. They had high levels of cortisol, but not severe.

Essentially, ashwaganda single-handedly brought them down to a healthy cortisol level without any other methods or supplementation.

# How To Supplement:

- 300-500mg, Immediately before breakfast
- 300-500mg, With your post-workout meal

# Melatonin

We've already talked about the importance of sleep for healthier cortisol levels. Melatonin delivers a one-two-punch. Taking melatonin before bed will help you fall asleep faster and have better quality sleep. Plus it has the added benefit of lowering cortisol.

But you have to make sure you take the right dose. Too much melatonin and you may wake up feeling drowsy and tired – one suspected cause of this is too little cortisol when you wake up.

You want the dose to be enough to reduce cortisol levels while you sleep, and improve sleep quality, without reducing the levels when you wake up too substantially. Most melatonin supplements come in 3, 5, or 10mg doses, but this is likely far too high.

# How To Supplement:

- 0.5-1.5mg, 30 minutes before bed
- Or take 1 capsule of <u>Tetrogen Night</u> Before Bed For A Full Dose

# Tongkat Ali



This popular testosterone booster is totally useless for testosterone boosting purposes – but there's a strong body of science proving it to be a powerful adaptogen.

Studies so far have found a 16% reduction in cortisol levels in healthy people who didn't report high stress levels – researchers suspect the reduction is much higher in people with measurably high cortisol.

Tongkat Ali is just one of the names it goes by. You could see it labeled under names including Eurycoma, Longjack, Malaysian Ginseng, or Tang Sawa.

Despite the (unproven) testosterone claims, it's safe for women to use as well.

# How To Supplement:

- 200-300mg of a 100:1 ratio extract, immediately before breakfast
- 200-300mg of a 100:1 ratio extract, before your post-workout meal

# **Chapter Summary**

- 1. Supplements are extremely effective for lowering cortisol levels
- 2. You can use supplements before lifestyle or diet changes, however it's still probably a good idea to try something like meditation first and use a supplement in addition to it.
- 3. Ashwaganda is an affordable, clinically proven

- supplement to lower cortisol and stress levels. It should be the first thing you try.
- 4. Melatonin, at a very low dose, will both improve sleep and reduce cortisol if taken before bed.
- 5. Tongkat Ali also has a powerful cortisol reduction effect. Try it alone or in addition to ashwaganda and melatonin.

# Chapter 7 **Strategies To Burn Visceral Fat**



Once you've brought your cortisol levels to a healthy point, your number 1 goal is to burn off this specific type of body fat.

Visceral fat isn't like other body fat. It's stubborn. It's degenerative. You probably want less of it in your body.

Now that your cortisol levels have dropped, you've dealt with the biggest problem of visceral fat – its stubbornness. When you think of that last bit of stubborn belly fat that never shifts

- even after you lose weight - that's probably visceral fat. But when you fix your high cortisol, you can strategically burn the visceral fat away, quickly and efficiently.

Once you've implemented the other cortisol-reducing strategies inside this book, you'll want to start an 8 week long visceral-fat-burning-focused period. This will be the strictest part of your journey to fight your belly fat, but I promise you'll be incredibly satisfied by the rewards.

It starts with your diet:

### **Fiber**



Fiber is the least talked about super-food out there. And I don't use the word 'super' lightly. The risk of countless conditions and diseases reduce the higher your fiber intake is.

Even if you're only worried about fat loss, fiber is low-calorie, very filling, and a craving-fighter. That's a great list, but you can

add one more advantage to it:

Increasing your fiber intake helps burn away visceral fat.

You can focus on increasing the amount of fiber-rich foods in your diet – foods like vegetables, fruits, seeds, nuts, and whole grains.

Another option is to take a fiber supplement before you eat. This is great because you'll get a consistent, high dose of fiber, without the inconvenience of having to eat too much 'rabbit food'.

We found that most fiber supplements on the market were missing something, so we made our own. A 3-ingredient fiber formula anyone can make at home.

You can find this recipe for free inside our 'Hormones & Metabolism' E-Course – just go to <a href="https://tetrogen.com/optin">https://tetrogen.com/optin</a> to get your free copy.

It's incredibly healthy and it's one of the best hunger suppressors we have ever tried.

# **Drink Less Alcohol**

We all love to have a drink on occasion, but when you want to get rid of that stubborn visceral belly fat, you should take a break from the booze for a few weeks.

Limit drink intake to 1 drink a few times per week. Don't worry; this isn't permanent booze-abstinence – just a short break to help you reach your goals.

# **Green Tea Extract**

It's become a popular weight loss supplement, but there's

something interesting about its specific effects – green tea extract burns a significantly larger portion of visceral fat compared to other fat burners.

Studies haven't yet discovered why it's so effective at fighting visceral fat, but the research is definitely conclusive enough that it's a tool you want in your arsenal.

You'll find green tea extract and 4 other, clinically-proven, hormone-optimizing fat burners inside <u>Tetrogen's Day</u> Formula.

# **Intermittent Fasting & Low Carb**



These diets are quite different for many reasons, but both have a substantial effect at reducing your visceral fat levels.

We would suggest choosing either an intermittent fasting diet or a low-carb/keto diet, and sticking to either for at least 8 weeks to maximize the reduction of visceral fat.

You can learn more about these diets and how they affect your hormones inside our free Hormones & Metabolism E-Course.

# **Chapter Summary**

- 1. Spend 4-8 weeks focused on cortisol/stress reduction before you focus on fat-loss.
- 2. There are 2 main types of body fat, visceral fat and subcutaneous fat.
- 3. Visceral fat is particularly bad for you, increasing your risk of heart disease, diabetes, and even certain cancers.
- 4. Visceral fat is around the waist and surrounds your organs it causes the ugly 'baby-bump' belly fat so many people hate.
- 5. Spend 8 weeks focused on burning away any visceral fat which has built up from years of stress and high cortisol some people will need longer.
- 6. Increase your fiber intake, reduce alcohol intake, and try to eat less/healthier for the 8 week period.
- 7. Try either an intermittent fasting or low-carb diet during the 8 week period, to maximize visceral fat loss.

# Chapter 8

# **Putting The Pieces Together**

Now that we've covered diet, exercise, and supplementation it's time to put together the pieces.

# **Step 1 – Reduce Serum Cortisol Levels**

### Goal:

 Lower Cortisol Levels Enough To Reverse Any Negative Health Or Metabolic Effects

# What Helps This Step:

- Discover any food sensitivities and remove from diet
- Mindfulness meditation
- Yoga
- Sleeping More/Consistent Sleep Schedule
- Ashwaganda Before Breakfast & With Post-Workout Meal
- Tongkat Ali Before Breakfast & With Post-Workout Meal
- Melatonin Before Bed

# What Hurts This Step:

Too much exercise/overtraining

- Too much stress
- Not enough sleep
- Bad sleep habits

# How Long To Stay In Step 1:

6-8 Weeks

# Step 2 – Implement Strategies To Burn Stubborn 'Visceral' Fat

### Goals:

 Burn off any pockets of stubborn, visceral fat, which have been triggered by high cortisol or other hormonal imbalances

# What Helps This Step:

- Intermittent fasting
- Low-carb/ketogenic diet
- High fiber intake
- Low alcohol intake
- Green tea extract

# What Hurts This Step:

- Too many calories
- Too much sugar
- High cortisol levels

# When To Start Step 2:

- 4-8 weeks after starting step 1
- Step 2 will not interfere with step 1; they should be done together as the blocking of cortisol will ensure maximum progress

# How Long To Stay In Step 2:

- Ideally, until you've reached your goal weight/waist measurement
- At least 8 weeks

# Step 3 – Increase Cortisol Strategically To Burn Fat

### Goals:

Increase cortisol levels during workouts to maximize fat loss

# What Helps This Step:

- HIIT (High intensity interval training)
- Heavy weight-training
- Caffiene before a workout

# What Hurts This Step:

- Traditional cardio
- Exercise immediately after eating (wait 1-2 hours)
- Taking cortisol-supressing supplements less than 3 hours before a workout

# When To Start Step 3:

# **Ideal**

After 8 weeks of step 1

# How Long To Stay In Step 3:

- There's no limit to step 3
- Use the methods any time you're on a fat-loss-focused workout plan

# **Epilogue**

Cortisol is such a demonized hormone, but like most things in life it's not so black and white. Yes, you definitely don't want high cortisol levels the vast majority of the time, but there's a time and place. Low cortisol can be as bad as high cortisol, so if you're not particularly overweight, stressed, or just aren't sure, visit your doctor.

Cortisol tests are very easy to do. Even if you're in the healthy range, ask your doctor how close you are to the high and low limits. You don't want the levels to be too close to the high limit or low limit – it's like goldilocks, you're looking for "just right".

The biggest lesson of this book and this series is balance – it's not just about the hormones, but everything that's connected to them. Forget about cortisol for a minute, just look at its greatest cause – stress. No one wants to live a stressful life. When you take steps to live healthier and happier, it's incredible how everything else in your health and life can fall into place.



We created this series to give regular people an understanding of these complicated hormones, in a way they can apply to their daily lives. We hope this book has done that for you.

Over the next few months we'll release books on other metabolic hormones for you. We'll tackle subjects like insulin sensitivity, cortisol, and more.

Until then, we have a free digital home study course available for you called 'Hormones & Metabolism'. It covers multiple hormones, just a little less in depth than these books. You can claim your free download at www.tetrogen.com/optin

We hope you enjoyed this book!

Jennifer Williams & The Tetrogen Team