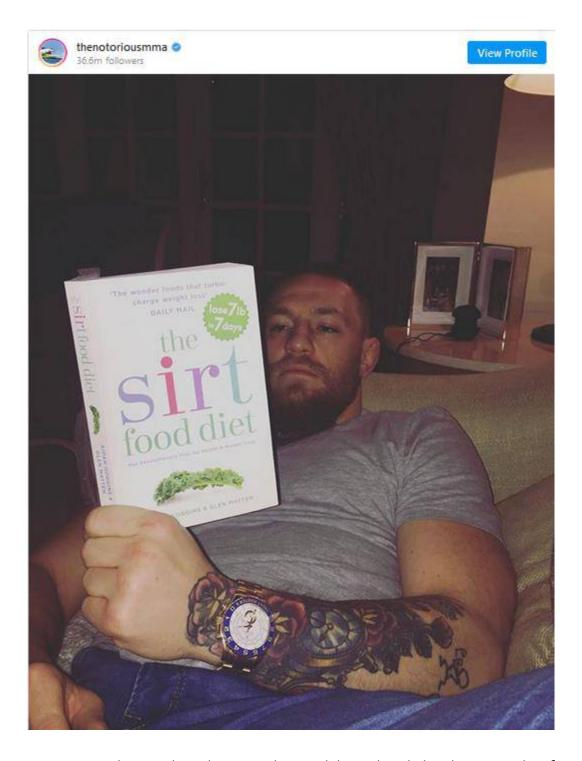
# Sirt Diet: More Than Just a 7-Day Fat Loss Plan

It's the diet that promises to torch fat in a week while leaving muscle untouched. But there's more to Sirtfoods than miracle claims – if the science behind it checks out, it could emerge that we've been thinking about healthy eating the wrong way for decades

You've heard of the Sirt Diet one way or another, even if you don't recognise the name. In news reports, it's presented as the kiloshredding plan that lets you eat chocolate and drink red wine, and promises to have looking like a supermodel and feeling like a superhero.

On Instagram, it's the thing UFC featherweight champ Conor McGregor does – the Irishman took a selfie while reading up on it a few days before the first of his two big 2016 fights against Nate Diaz and scooped an above-average 116,000 likes.



To *Cosmo* readers, it's what Jodie Kidd and Adele do – and, of course, to naysayers it's just the latest fad, another calorie-

restriction-and-juice scam that's making promises it can't possibly keep.

But the fact is, there's a lot more scientific clout behind Sirt than the typical drop-fat-fast plan. It's based on a class of compounds that have been discovered only in the past decade, and experimental evidence suggests that they're far more important than previously thought. And if the people behind it are right, we need to adjust our focus when we're thinking about what to eat.

#### Is the Sirt Diet Just Another Fad?

What's the truth? What's the evidence? And what's the science behind it all?

First, the science. Sirtuins – from which Sirt gets its name – are a group of Silent Information Regulator (SIR) proteins that ramp up our metabolism, increase muscle efficiency, switch on fat-burning processes, reduce inflammation and repair damage in cells. In summary, sirtuins make us fitter, leaner and healthier (there's also evidence that they might help combat serious diseases such as Alzheimer's and diabetes – more on that later).

Mild forms of stress – including exercise and calorie restriction – trigger the body's production of sirtuins, but it's recently been discovered that chemical compounds known as sirtuin activators,

found naturally in fruit and vegetables, can do the same thing.

Certain foods – Sirtfoods, as they've been dubbed by diet creators

Aidan Goggins and Glen Matten – are especially high in these
sirtuin activators and so, the theory goes, if you eat a diet mostly
composed of these foods you'll lose fat and improve your health.

To test this idea, Goggins and Matten created the Sirt Diet, the seven-day eating plan that's caused all the fuss. It's simple enough: during the first three days, daily calorie intake is limited to 1,000 and consists of three green juices, plus a Sirtfood-rich meal. On days four to seven, calorie intake is increased to 1,500 and consists of two juices and two meals. After that all-out first week, the recommendation is to eat a balanced diet rich in Sirtfoods, along with more green juices. On the face of it, this sounds awful: even most fasting diets allow more calories. But is it?

"I didn't feel hard done by at all," says Rannoch Donald, a trainer and coach who tried the diet. "The juice is key: it's like rocket fuel. After the initial week, following the diet was plain sailing, and after three weeks I was 5kg lighter. But, crucially, I also felt the best I have in a couple of years. I lost body fat, I was sleeping better, I had no gut issues, I was feeling energised... I was teaching and training half a dozen classes a week with fantastic recovery, even from the most gruelling Brazilian jiu jitsu session."

To test the diet on a wider scale, Goggins and Matten recruited 37 members of KX Gym in London, 15 of whom were overweight. All had been doing a moderate amount of exercise; none increased it and some even began doing less. And the results in just one week, even considering the calorie restriction, were astounding: the test subjects lost an average of 3kg of fat but put on around 0.8kg of muscle. With a standard diet that cut calories by the same amount in a week, you'd expect to lose a maximum of 1kg.

### Why are there no Sirt supps?

It's the obvious question: if sirtuins are so game-changing, why aren't pharmaceutical and supplement companies scrambling to distill them into pill form? Short answer: because the mechanism by which they operate still isn't fully understood, meaning that supps won't necessarily be as well absorbed by the body as the natural forms.

Goggins and Matten point to the example of resveratrol. "In supplement form it's poorly absorbed by the body, but in its natural food matrix of red wine, its bioavailability (how much the body can use) is at least sixfold higher. We believe it's better to consume a wide range of these nutrients in the form of natural wholefoods, where they co-exist alongside the hundreds of other natural

bioactive plant chemicals which act synergistically to boost our health." In other words: eat better, rather than just popping a pill.

#### Fast and furious?

Of course, this is the aspect of the Sirt Diet that has critics howling. Most point to the fact that, at least in the initial stages, the plan focuses on calorie restriction and that, according to previous experience, weight loss over 1kg a week is unhealthy or unsustainable. It's a valid concern: in most calorie-restriction diets, early weight loss tends to come from calorie depletion and reduced water-bloating, and – as recent research on contestants in TV's *The Biggest Loser* shows – simply rationing yourself every day can slow your metabolism to a near-permanent crawl, as well as messing with your body's levels of "hunger hormone" ghrelin, making you permanently hungry.

But, Goggins and Matten counter, this isn't what Sirt does. Yes, the diet mimics some aspects of fasting, and in the first seven days of the full diet Sirtfoods appear to turbo-charge the effects of calorie restriction. But it's a bit more complicated than just starving yourself for short-term changes. So how does it work? Well, firstly, it's vital to understand the "stress" part of the equation. "Everyone needs some amount of stress in their lives," says Goggins. "Every

time we train we create a stress on the body, which can be a good thing or a bad thing. There's a temptation to always train harder, to try harder, but that carries a risk of building up chronic stress, which carries the risk of burnout and a weakened immune system."

The flipside: by exposing your body to low-grade sources of stress, you'll increase your body's ability to cope. "Plant stress responses are actually more sophisticated than our own," explains Goggins. "Think about it: if we are hungry and thirsty we can go in search of food and drink; too hot - we find shade; under attack - we can flee. In contrast, plants are stationary and must endure all the extremes of these physiological stresses and threats. In consequence, over the past billion years they have developed a highly sophisticated stress-response system that humbles [humans'] by producing a vast collection of natural plant chemicals – called polyphenols – that allow them to successfully adapt to their environment and survive. When we consume these plants, we also consume these polyphenol nutrients, which activate our own innate stressresponse pathways. We're talking here about exactly the same pathways that fasting and exercise switch on - the sirtuins."

Polyphenols, according to Goggins, are the one thing the typical American diet has enough of, and when stripped of them the much-lauded Mediterranean diet loses almost all its effectiveness.

Via Sirtfoods, polyphenols have a host of weight-management effects, including encouraging white adipose tissue (traditionally the bad stuff) to mimic brown adipose tissue (the "good" fat that helps to generate body heat). They also help fullness issues, by improving your body's sensitivity to the satiety hormone leptin.

"These natural plant compounds are now referred to as 'calorie restriction mimetics' due to their ability to turn on the same positive changes in our cells as would be seen during fasting, such as fat burning," says Goggins. "The implications are gamechanging. When we're provided with more advanced signalling compounds than we produce ourselves, the outcomes are superior to anything we can achieve alone."



#### The real health foods

There's also more to Sirt than body composition. Outside Goggins and Matten's tests, more scientifically controlled trials on single Sirtfoods have shown promising results. In October 2015, for instance, researchers at Columbia University in New York found that drinking water with a gram of cocoa – especially rich in the sirtuin activator epicatechin – dissolved in it led to improved memory in 19 middle-aged subjects.

In November the same year, researchers at Monash University in Melbourne reported that when patients in the early stages of type 2 diabetes added a gram of turmeric a day to their diets, it improved their working memory. For diabetics, there's some evidence that sirtuin activation increases the amount of insulin that can be secreted and helps it work more effectively. In the skeleton, sirtuins promote the production and survival of osteoblasts, a type of cell responsible for building new bone.

The next big thing for Sirt, when more research is performed, will be in its relationship to leucine, the main muscle-builder among the branched-chain amino acids (BCAAs). Leucine is a key regulator of protein synthesis and activates a protein known as mTOR

(although you don't need to worry about that to understand the next bit).

"Leucine is a double-edged sword," explains Goggins. "It's an accelerator for muscle growth, but if you don't have the internal machinery to deal with it, the engine explodes." In theory, having a more Sirtfood-heavy diet could increase the amount of protein your body can successfully assimilate, consigning the old "20-30g a sitting" recommendation firmly to the past.

Of course, all of this needs more research. Thirty-seven people in one gym isn't much of a sample size, and other studies on the effects of sirtuins have been done on animals or human cells — neither guaranteed to accurately reflect what goes on inside the body. But for all the criticism of the diet's more radical claims, it's hard to see what you stand to lose by following some version of the Sirt Diet. Even if you put aside the calorie-restricted version of the plan and jump straight to "maintenance" mode, you'd be eating a huge variety of the foods identified as key in the so-called Blue Zones, areas of the world like Sardinia and Okinawa where people live longer, healthier lives.

"I don't like the word diet, but this is diet as in lifestyle as opposed to some quick-fix intervention," says Donald. "It's essentially about eating well. And despite the appearance of green juice drinks, the overall philosophy is about the inclusion of healthy whole natural ingredients rather than the deification of 'superfoods'." Or, to put it another way: you're unlikely to get less healthy by getting more kale, berries, walnuts and red wine into your diet. Even if you aren't a supermodel or a UFC fighter.

#### Sirtfood Diet Essentials

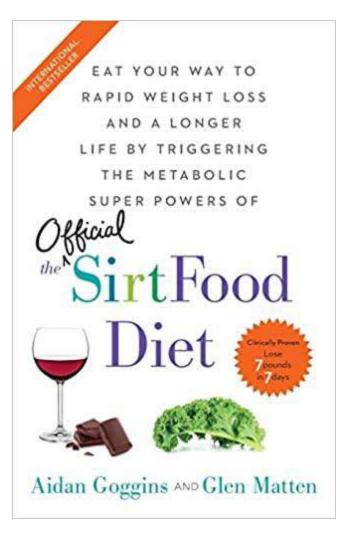
These are the highest-rated 20 foods for a Sirtfood-rich diet, and how you can incorporate them into your daily meals

- 1. **Bird's eye chilli** Also sold as Thai chillies, they're more potent than regular chilis, and also more packed with nutrients. Use them to set off sweet or sour recipes.
- 2. **Buckwheat** Technically a pseudo-grain: it's actually a fruit seed related to rhubarb. Also available in noodle form (as soba), but make sure you're getting the wheat-free version.
- 3. **Capers** In case you're wondering, they're pickled flower buds. Sprinkle them over salad or roasted cauliflower.
- 4. **Celery** The hearts and leaves are the most nutritious part, so don't throw them away if you're blending up a shake.

- 5. **Cocoa** The flavonol-rich kind improves blood pressure, blood sugar control and cholesterol. Look for a high percentage of cacao.
- 6. **Coffee** Drink it black there's some evidence that milk can reduce the absorption of sirtuin-activating nutrients.
- 7. **Extra virgin olive oil** The extra virgin type has more Sirt benefits, and a more satisfying, peppery taste.
- 8. **Green tea or matcha** Add a slice of lemon to increase absorption of sirtuin-producing nutrients. Matcha is even better, but go Japanese, not Chinese, to avoid potential lead contamination.
- 9. **Kale** Includes huge amounts of sirtuin-activating nutrients quercetin and kaempferol. Massage it with olive oil and lemon juice to serve it as a salad.
- Lovage It's a herb. Grow your own on a windowsill, and throw it into stir-fries.
- 11. **Medjool dates** They're a hefty 66% sugar, but in moderation don't raise blood sugar levels, and have actually been linked to lowered rates of diabetes and heart disease.

- 12. **Parsley** More than just a garnish it's high in apigenin. Throw it into a smoothie or juice for the full benefit.
- 13. **Chicory** Red is best, but yellow works fine. Throw it in a salad.
- 14. **Red onion** The red variety's better for you, and sweet enough to eat raw. Chop it and add to a salad, or eat it with a burger.
- 15. **Red wine** You've heard of resveratrol: the good news is, it's heat stable, so you can get benefits from cooking with it (as well as glugging it straight). Pinot noir has the highest content.
- 16. **Rocket** One of the least interfered-with salad greens available. Drizzle it with olive oil.
- 17. **Soy** Soybeans and miso are high in sirtuin activators. Include it in stir-fries.
- 18. **Strawberries** Though they're sweet, they only contain 1tsp of sugar per 100g and research suggests they improve your body's ability to handle sugary carbs.
- 19. **Turmeric** Evidence suggests the curcumin in it has anticancer properities. It's difficult for the body to assimilate

- alone, but cooking it in liquid and adding fat and black pepper increases absorption.
- 20. **Walnuts** High in fat and calories, but well established in reducing metabolic disease. Smash them up with parsley for sirt-flavoured pesto.



## The Sirtfood Diet

Book by Aidan Goggins and Glen Matten

Available on **Amazon**