



BY SARAH HALL, online coach and biokineticist (www.sherifftraining.co.za)

Why fixating on the scale every day is so unhealthy

WEIGHT WATCHERS

CAUSE FOR CONCERN?

Through all the research I have done and through my experience with clients it is clear that during a 24-hour period your body can cycle through phases where it can be as much as 2.5kg above or below your baseline weight. For someone who weighs 50-60kg this is a relatively big fluctuation and can be quite alarming for the ill-informed.

So, when is a shift in the scale cause for concern? Well, these 'normal' fluctuations can be attributed to eating, drinking, sweating, and your body's production and release of heat, known as thermogenesis. These all affect the body's composition and therefore your overall weight. As stated, this may either lead to temporary weight gain or some degree of weight loss.

Whenever you step on the

scale the numbers will reflect your true weight, together with the weight variance according to the factors discussed in this article. True weight gain and true weight loss are processes that occur over a longer period of time, which is the reason why regular, accurate and timeous assessments should be done before any changes in diet and training are made.

It takes roughly 6-8 weeks for the body to make lasting changes following a shift in dietary approach or a new training plan. As such, a full assessment of body metrics and composition should



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only be done every six weeks, but micro-measuring can be done on a weekly basis to ensure progression is happening in the right direction.



THE SCIENCE OF WEIGHT FLUCTUATIONS

Eating and drinking can affect body weight daily in the following ways:

1. VARIATIONS IN GLYCOGEN STORAGE

Glycogen is the stored form of the carbohydrates we ingest. It can be stored both in the liver and muscle cells, with minuscule amounts stored in our red and white blood cells, brain and kidneys. We can store up to 100g of glycogen in our liver, and up to 350g in our muscle cells. In order for our body to digest and store each gram of carbohydrate as glycogen it will need up to four times the amount in water to bond. This is why,

if carbohydrates are dropped from the diet the body will respond by ridding itself of water as glycogen stores are metabolised for energy.

2. THE SODIUM CONTENT OF THE FOOD INGESTED

If you are on a deficit diet and your sodium intake has been restricted, a hormone known as aldosterone will be secreted to a lesser extent. Aldosterone is responsible for controlling blood pressure through water regulation. With an increase in sodium intake,

more aldosterone is released, which leads to an increase in water retention. This obviously affects our weight.

3. INCREASING WATER INTAKE

The amount of water you usually drink, together with how efficient your kidneys are at filtering that water, can actually result in a drop in weight as your body tries to restore homeostasis. Remember, this is not a loss of body fat. It's merely a loss of body weight through water loss.



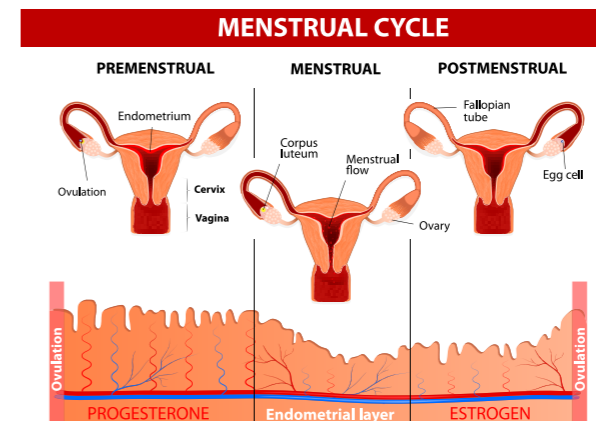
THE HORMONAL EFFECT

In terms of the way hormones affect body weight daily, it is unlikely that hormones will cause a sudden increase or decrease in weight from day to day. Any fluctuation in weight in this regard is usually the result of the effects that either elevated or reduced amounts of these hormones have over a few days or weeks, and how they act on our bodies. However, understanding these hormones and their effects on weight will help to put our minds at ease.

The five most relevant hormones that affect weight throughout the course of a month, specifically within the female body, are ghrelin, cortisol, leptin, and the female sex hormones oestrogen and progesterone.

The secretion of ghrelin, the 'hunger hormone', is highest in the morning and causes an increase in appetite. Eating breakfast and other planned, regular meals will help to control the level of this hormone to prevent overeating or uncontrolled snacking.

Cortisol levels are also highest in the morning, as well as during times of



OESTROGEN RELEASE, WHICH VARIES ACCORDING TO A WOMAN'S MONTHLY MENSTRUAL CYCLE, CAN CAUSE WATER RETENTION AND HUNGER CRAVINGS.

increased stress, both physical and emotional. It is beneficial in that its release stimulates our fight/flight mechanism and gives us the energy required to respond to the impending physical demands by breaking down glycogen, fats and even muscle. However, if cortisol levels remain elevated for too long it can also trigger hunger.

THE FIVE HORMONES THAT AFFECT WEIGHT ARE: GHRELIN, CORTISOL, LEPTIN, AND THE FEMALE SEX HORMONES OESTROGEN AND PROGESTERONE.

It is therefore important that you reduce levels of cortisol through regular eating, which will assist in preventing unnecessary weight

gain with missed meals or unscheduled snacks.

Leptin is released from the fat cells to control hunger. It is also responsible for burning stored fat as a source of energy. As such, higher levels of this hormone are beneficial for curbing weight gain temporarily.

Oestrogen release, which varies according to a woman's monthly menstrual cycle, can cause water retention and hunger cravings. Progesterone does the opposite and can lead to a reduction in water retention and increased insulin sensitivity.

LIFESTYLE INFLUENCERS

The normal activities of daily life can also affect our weight daily in the following ways:

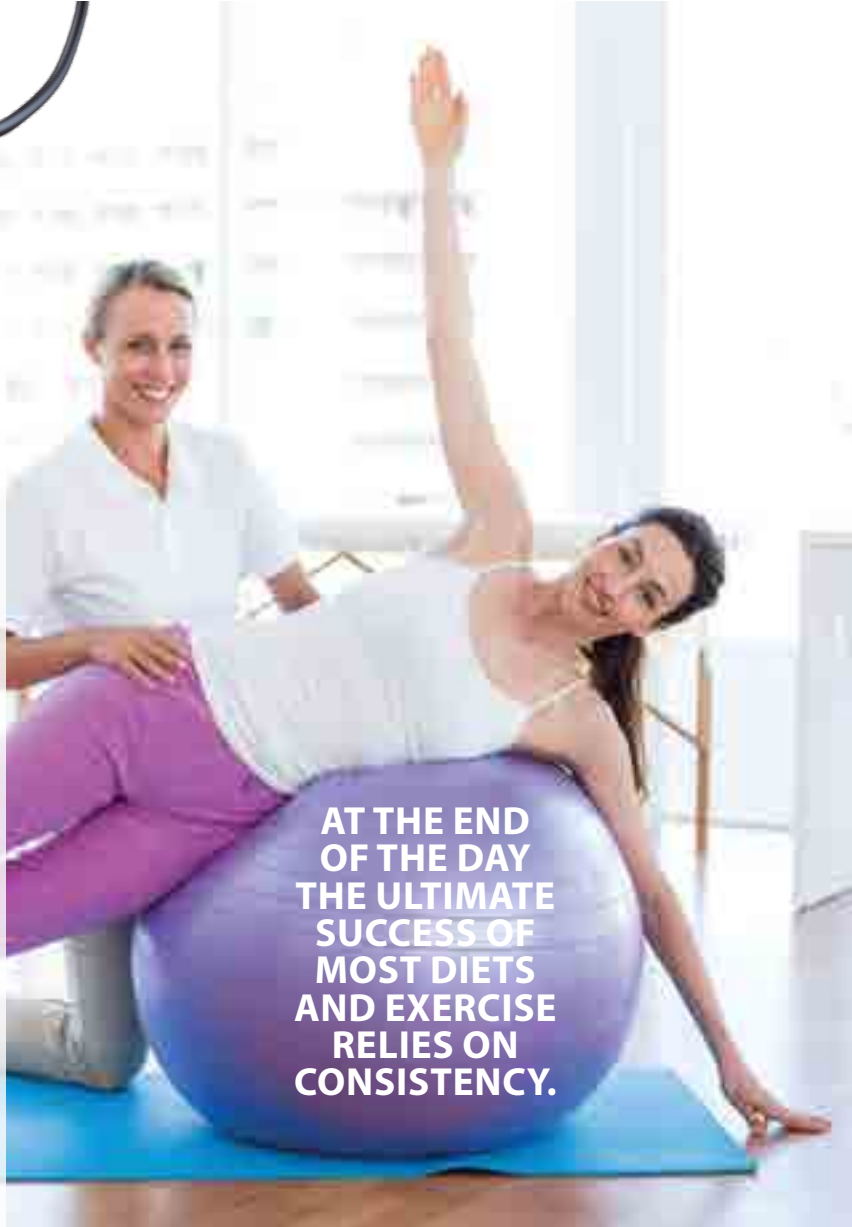
1. Excretion of waste over and above the water and salts that we sweat out every day can result in weight fluctuations of between 500g and 2kg.
2. The supplements we ingest can cause water retention. For example, whey protein and creatine affect weight to differing degrees.
3. Weight training causes muscle damage, which is beneficial as it results in the repair and growth of the damaged tissue, building bigger, stronger muscles. However, an increase in water retention in the muscle occurs during the repair phase, which can lead to small fluctuations in weight, which can be more pronounced when bigger muscle groups or multiple muscle groups have been worked.
4. Travelling can cause water retention due to the reduced mobility of the joints and decreased circulation.
5. Smoking cessation and depression directly affect behaviour patterns related to eating, drinking and exercise, which can affect weight gain over a few days.
6. Insufficient sleep and an increase in stress levels can lead to the increased storage of fat. This can also affect behaviour patterns in the same way as smoking cessation.
7. Food sensitivities can cause bloating and water retention due to the inflammatory response of the gut.



MEDICAL REASONS

The following medical factors can lead to consistent weight gain with no other direct changes in diet, training or behaviour. Any sustained weight gain attributed to any of these factors should be looked into immediately as there may be cause for concern:

- 1. Medication use** such as birth control, insulin and certain anti-depressants and beta-blockers.
- 2. Thyroid complications** (e.g. hypothyroidism) that lead to a decrease in appetite but reduce your ability to burn fat as fuel, which subsequently leads to weight gain.
- 3. Kidney failure, heart failure or liver disease** – signs of stress or strain on any of these organs will lead to fluid retention.
- 4. Ovarian disorders** such as cyst formation, ovarian cancer or polycystic ovarian syndrome can lead to fluid retention and a consistent rise in weight.
- 5. Body toxicity** – if your body is not absorbing nutrients correctly, a build-up of acidity and toxins can result. This can affect digestion and bowel function with a subsequent increase in weight.
- 6. Pregnancy.**
- 7. Cushing's syndrome** – a rare condition where excess cortisol production results in the preferential storage of fat, instead of converting it into usable energy. This commonly increases abdominal girth and overall weight.
- 8. Early onset menopause.**
- 9. Fatty acid deficiency.**
- 10. Poor circulation or blockages** in the lymphatic system.



AT THE END OF THE DAY THE ULTIMATE SUCCESS OF MOST DIETS AND EXERCISE RELIES ON CONSISTENCY.

REGAIN YOUR SANITY

Clearly there are a multitude of factors that can affect our weight daily. Without a thorough understanding of all the elements at play it can be easy to fall into the weight watcher's trap and make knee-jerk decisions on your diet and prep based on what the scale tells you from one day to the next. This is a sure-fire way to derail your best efforts and will destroy the conditioning you've worked so hard to achieve.

> Know your body

Accordingly, the better you know your body and how it responds to various foods and supplements, certain

types of exercise, and the hormonal changes you experience, particularly your monthly menstrual cycle, among other factors, the better you'll understand the fluctuations you see on the scale. Just ensure that you don't read too much into them. At the end of the day the ultimate success of most diets and exercise relies on consistency.

> Put it into perspective

Your weight is just one of a number of factors that needs to be taken into account, in addition to your body fat percentage, activity level, body type, basal metabolic rate, and environmental conditions, to determine the best approach to achieve the ideal outcome come show day. **So don't obsess over it.**



PAY ATTENTION BUT DON'T OBSESS ABOUT THE SCALE!

ABOUT SARAH HALL

Sarah Hall is a biokineticist and online coach specialising in exercise rehabilitation, running, contest prep and exercise modification. She has been practising for over 10 years, having started her career at the Sports Science Institute of South Africa, before going into private practice, where she has been for over seven years. Her academic and sporting achievements include cum laude honours in B.Sc. Biokinetics, a back-to-back Comrades Marathon medal, and a top 4 placing in every fitness show she has competed in. Her passion lies in correcting the movement dysfunction that leads to injury, adapting exercise to enable continuous training despite injury, assisting athletes in achieving their aesthetic goals, performing medical and biomechanical assessments, and pre- and post-op rehabilitation. She treats and assists athletes and clients from as young as nine years of age. Sarah currently runs a private practice in Sandton, Johannesburg, with a team of biokineticists who work closely with her.

