



CHAPTER 17

WEIGHING UP WEIGHT LOSS

The impact of COVID-19 on diet has revealed 35% of Australians gained weight during the pandemic.¹ Many factors can contribute to unintentional weight gain. Poor sleep, sedentary activities, consuming more alcohol, and eating too many processed or sugary foods are just some of the problems. Weight gain and obesity is a concerning epidemic worldwide that has been rising over the years since people began eating a high carbohydrate diet.

We are a fast society today, and everything happens quickly. People do not have the time to spend preparing and cooking food. So, the faster the food can be available, the more popular it is. Enter carbohydrates.

1. Ipsos Survey Press Release, <https://www.ipsos.com/en-au/more-third-australians-have-gained-weight-during-pandemic-ipsos-survey>> accessed December 2023.

Cereal, bread, pasta, pizza, doughnuts, pastries, pies, chips/fries, pretzels—they are everywhere and instantly available to eat. No preparation is necessary at all.

After you eat, your body breaks down carbohydrates into glucose (sugar). High carbohydrate intake equals high glucose released in the bloodstream. Glucose travels through the blood providing the required energy for all body cells, this process causes your blood sugar level rises. As it does, the pancreas releases the hormone insulin.

Insulin's role is to increase the uptake or delivery of glucose into the cell. If there is excess glucose beyond what the body needs for immediate energy, it is converted into glycogen and stored like a little bunch of grapes in the cell for future use.

The muscle cells are the biggest reservoir of glycogen stores, as they are the workhorses of the body and have the greatest requirements for glycogen.

After the energy cycle and filling of glycogen stores, the leftover or remaining glucose (which is common on a high carbohydrate diet) is stored as fat. If you are taking in more calories than your body needs, or is burning regularly over time, weight gain will likely result.

This brief overview of the journey of glucose shows fats don't make you fat!

THE SOLUTIONS

STEP ONE: DISCOVER THE CAUSE

There can be many reasons behind weight gain, understanding the causes of your weight gain is the first step to working on a plan to reduce that weight.

What fat makes you fat?

Carbohydrates: One of the most damaging fats are those produced from high carbohydrate intake, and the most dangerous carbohydrate is modern wheat. In the 1950's wheat was hybridized to produce a higher yield of grain from each plant. In this process a starch was created that raises blood glucose levels quite dramatically. The response in the body to high carbohydrate intake influenced Dr William Davis to title his bestselling book, *Wheat Belly*. It is a very appropriate name for a book that clearly shows how this starch is converted quite quickly to a visceral type of fat that the body stores on the belly.

Trans fats: These altered fats are another type of fat that the body has difficulty using. Margarine and heated oils are among this group. Polyunsaturated fats such as vegetable oils, sunflower, and canola oil are the most common

heated fats, and yet the most susceptible to damage because of their open molecular formation. When heated, the molecular structure of these fats change, increasing the formation of trans fats. Artificial trans fats also occur when vegetable oils are chemically altered to stay solid at room temperature, such as with margarines. Trans fats are well known in nutrition circles to be very damaging to the body.

The body's preferred fat for fuel is saturated fat as the body quickly burns it to create energy. In addition, recent studies are revealing that saturated fat has little effect on heart disease or death and in healthy adults may actually be linked to a lower risk of other conditions including obesity, type 2 diabetes, and high blood pressure.²

Stress: There is also a strong relationship between stress and weight gain. When stressed, our levels of cortisol (the stress hormone) increase. This may be tied to a higher risk of weight gain and obesity. Chronic stress is known to alter the pattern of food intake, dietary preference, and digestive issues.³

Other issues: Sugar intake from sweetened beverages; exposure to endocrine disrupting chemicals found in everyday household items like food containers, toys, cookware, personal care products, cleaning agents; medical supplies such as mercury; hormone imbalances; lack of exercise; and consuming over processed foods are also all of concern. Once a cause is identified, steps need to be put in place to eliminate or control the causative factor. This is where the SUSTAIN ME principles can help.

STEP TWO: USE THE 'SUSTAIN ME' PRINCIPLES TO LOSE WEIGHT EASILY AND QUICKLY



SUNSHINE: A lack of regular exposure to sunshine has been shown to be the key to putting on weight. Vitamin D is created by our skin being exposed to sunshine, this is vital for the absorption of minerals, which help to nourish every cell. When our cells are well nourished, our body will not cry out for food.

It has also been discovered that white adipose tissue, which is known as the 'bad' type of fat that stores calories as fat, shrinks under the effect of sunshine. The sun penetrates our skin and reaches the white adipose tissue just beneath,

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2. Gribbin S, Enticott J, Hodge AM, et al (2022). "Association of carbohydrate and saturated fat intake with cardiovascular disease and mortality in Australian women" *Heart* 2022; 108:932-939.
 3. Scott KA, Melhorn SJ, Sakai RR. (2012). "Effects of Chronic Social Stress on Obesity." *Current Obesity Reports*. 1 March 2012, pages 16-25. doi: 10.1007/s13679-011-0006-3.

reducing it in size and releasing the fat cell so our cells don't store as much fat.⁴

When exposed to organic pollutants and heavy metals the body also uses fat cells to store these toxins in order to protect vital organs, increasing the amount of body fat. Ironically, these toxins may have contributed to weight gain in the first place. When a person starts to lose weight, this fat is broken down and these toxins are released into the blood stream increasing the risk that they will reach critical organs.⁵ Arsenic, cadmium, lead, and mercury are all toxins known to be excreted through the skin, often at rates to match, or even exceed, urinary excretion.⁶ Becoming hot in the sunshine or by saunas increases perspiration which can assist the body to expel these pollutants correctly.



USE OF WATER: Every cell, and therefore every function in the body, is dependent on water. Drought-stricken land can be devastating, and so can drought-stricken bodies!

In his book, *Your Body's Many Cries for Water*, Dr Batmanghelidj shows how every part of the body is negatively affected by a lack of water. He even explains how it can cause weight gain through attempting to protect the tissues from the damaging effects of dehydration.

Our body loses an average of two and a half liters of water a day. This must be replaced by at least eight glasses of pure water. Herbal teas and fresh fruits and vegetables as part of our food plan do slightly contribute to our fluid intake.

As all caffeine and sugar drinks have a dehydrating effect on the body, they cannot be part of the daily fluid intake.

Ideally, cease drinking water half an hour before meals and resume one and a half to two hours after meals. This allows digestion to proceed without interruption, as watering down the digestive juices can compromise the digestive process.

Taking a small crystal of Celtic salt before each glass of water allows the water to be transported directly into the cells.

Often, the body cannot distinguish between hunger and thirst. Water, and water only, should be consumed between meals.

4. Ondrusova, K., Fatehi, M., Barr, A. et al. (2017) "Subcutaneous white adipocytes express a light sensitive signaling pathway mediated via a melanopsin/TRPC channel axis." *Scientific Reports*, Vol 7, Article number: 16332. <<https://doi.org/10.1038/s41598-017-16689-4>>

5. Lee YM, Kim KS, Jacobs DR Jr, Lee DH. (2017) "Persistent organic pollutants in adipose tissue should be considered in obesity research." *Obesity Reviews*. Vol 18, Issue 2, pages 129-139. PMID: 27911986.

6. Sears ME, Kerr KJ, Bray RI. (2012). "Arsenic, cadmium, lead, and mercury in sweat: a systematic review." *Journal of Environmental and Public Health*. 2012:184745. doi: 10.1155/2012/184745.



SLEEP: The timing and amount of sleep is essential for maintaining healthy physical, mental, and emotional functioning. In his fascinating book, *Why We Sleep*, Dr Matthew Walker explains in detail how even having six hours of sleep a night instead of eight can cause weight gain.

Disturbed sleeping patterns, in terms of both quantity and quality, interferes with the part of our brain where we make decisions, thus affecting the choices we make on when and what we eat. This also interferes with leptin production, the hormone which controls appetite, which can lead to increased energy intake, mainly from snacking, especially on foods rich in fat and carbohydrates.

Dr Walker found that when people have eight hours of sleep a night, they are able to make better decisions on what food they eat and when they eat it.

Studies are also showing how the release of weight-controlling hormones are closely related to the body's circadian rhythm. This is recognized as a risk factor for weight gain in the constantly changing sleep patterns of shift workers.⁷

In addition, a full night's sleep increases the effectiveness of digestion; thus, we are more likely to burn our fuel instead of storing it.

The most effective sleeping patterns for optimal hormonal and metabolic function is a duration of eight hours of sleep a night that includes several hours before midnight. For example, 9pm to 5am or 10pm to 6am. For the very diligent, it may be 8pm to 4am. These times allow for all the sleep cycles that we go through every night to be fully accomplished and will help with weight loss.

When we sleep, our stomach needs to sleep, too. We sleep more peacefully when we have an empty stomach. A well rested stomach digests more efficiently which contributes to weight loss by better distribution of the glucose. Sleeping with a stomach full of food gives the body no choice but to store the glucose, thus increasing weight gain and can also cause acid reflux.

Retiring early also prevents evening hunger.



TRUST IN DIVINE POWER: In his book, *The Gabriel Method*, Jon Gabriel explains how he successfully went from 183kg down to 80kg. That is a loss of 103kg in two and a half years!

He discusses the power of High Intensity Interval Training (HIIT) and how it flips our metabolism to burning fat. He also claims a major part of his weight loss success was picturing a slender body in his mind. The cells in the body are very obedient to the mind, more so than most realize.

7. Suwazono Y, et al (2008). "A longitudinal study on the effect of shift work on weight gain in male Japanese workers. *Obesity* (Silver Spring). Vol 16, pages 1887-93. doi: 10.1038/oby.2008.298.

When we imagine a trim shape to our body, the cells begin to work toward fulfilling the dream. Sorry to disappoint you, but this alone is not enough! All the pieces come together in the jigsaw of our body, and the mind plays a part.

"For as he thinks in his heart, so is he." Proverbs 23:7

It is a principle that God placed in our body; our thoughts affect our body just as much as the health of the body has an influence on the functioning of our mind.

You can also call this faith; faith in an amazing body that God created with an inbuilt ability to heal. Believing that you will heal and that everything you are doing will help with weight loss gives added power to be able to achieve this result.

Dr Norman Doidge is a neurologist who wrote *The Brain That Changes Itself* a book full of the science and stories that illustrate this principle.

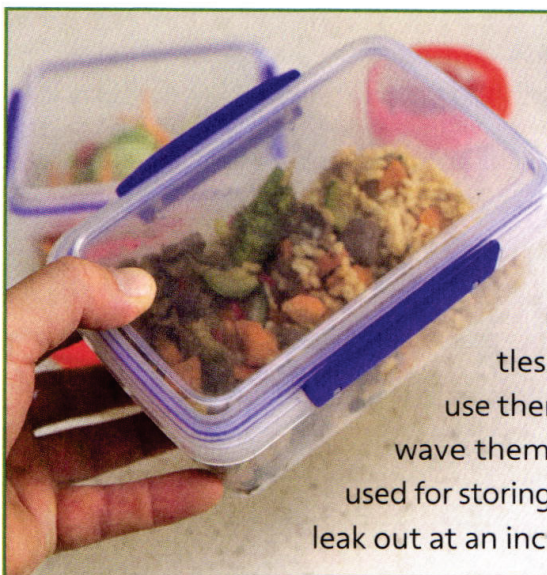


ABSTAIN: If your aim is to lose weight then there are some items to abstain from or greatly reduce, these include carbohydrates, especially wheat.

Eliminate refined sugars.

Eliminate caffeine and alcohol.

Abstain from a sedentary lifestyle.



Endocrine Disrupters

Avoid endocrine disrupters. These are chemicals, such as the contraceptive pill, that interfere with our natural hormones, especially estrogen. These chemicals are also often used to make plastic containers, cans, or BPA water bottles. If you do keep plastic containers, don't use them to store fatty foods, and never microwave them. When these containers are heated or used for storing food the endocrine disrupting chemicals leak out at an increased level into the food.⁸



INHALE: Pay closer attention to your breathing. Inhale low, slow and deep, breathing from your belly using your diaphragm, in and out through your

8. Sáiz J, Gómara B. (2017). "Evaluation of Endocrine Disrupting Compounds Migration in Household Food Containers under Domestic Use Conditions." *Journal of Agricultural and Food Chemistry*. Vol 65 Issue 31, pages 6692-6700. doi: 10.1021/acs.jafc.7b02479.

nose. Controlled breathing reduces hunger and appetite and decreases stress levels by lowering the stress hormone, cortisol.⁹

Excess cortisol levels can cause food cravings, especially for sweet, fatty, and salty foods that stimulate glucose production. This excess glucose is then converted into fat, which gets stored in your body. When cortisol goes up, your body holds onto calories and when it goes down, your body lets go of them.

Deep breathing through your nose increases the supply of oxygen to your whole body which aids to improve digestion. When digestion improves, we are able to access the nutrients out of our food more effectively which increases nutrition at a cellular level.

Try taking ten deep breaths before your next meal and see if you notice a difference!



NUTRITION: A change in the food we eat can dramatically influence weight loss. Even though carbohydrates are an important part of our diet they are often overused and can contribute to weight gain and obesity.

› **Low Carbohydrates**

On a vegetarian diet, it is impossible to totally eliminate all carbohydrates, but there is no need to do so. Carbohydrates are not bad; it is only when they are overeaten and refined that a problem arises.

The highest carbohydrate food group is grains, they are also a significant source of protein, a nutrient that is crucial for muscle and bone health, digestion and more. This makes grains an important addition to our diet but they are best kept to a small part of the menu and ideally gluten free, for example rice, corn, buckwheat, millet, and spelt.

Not all carbohydrates release energy at the same rate. Some foods such as quinoa, vegetables, and most legumes, are known as slow-release carbohydrates, or low GI. These foods provide a more sustained, slower release of energy avoiding the usual spike in blood sugar levels that carbohydrates usually cause, this will help you feel full longer.

› **High Fibre**

All plant foods are high in fibre and are necessary to clean and sweep the colon, particularly fruit and vegetables. Fibre also contributes to the full feeling after a meal, causing your intestinal tract to send a signal to your brain to release more leptin, this hormone makes you less hungry,

9. Ma X, et al (2007). "The Effect of Diaphragmatic Breathing on Attention, Negative Affect and Stress in Healthy Adults." *Frontiers in Psychology*. 2017 Jun 6;8:874. doi: 10.3389/fpsyg.2017.00874.

WHAT CARBOHYDRATES LOOK LIKE

Grams of carbohydrates per 100 grams of food.¹⁰



preventing overeating, promoting reduced food intake and increasing the use of stored fat.

As fruit is higher in sugar, if your aim is to lose weight it is best to keep to low-GI fruits and concentrate more on vegetables.

Whole carbohydrates are minimally processed and contain the fibre found naturally in the food, while refined carbohydrates have been processed more and have had the natural fibre removed or changed.

➤ Generous protein

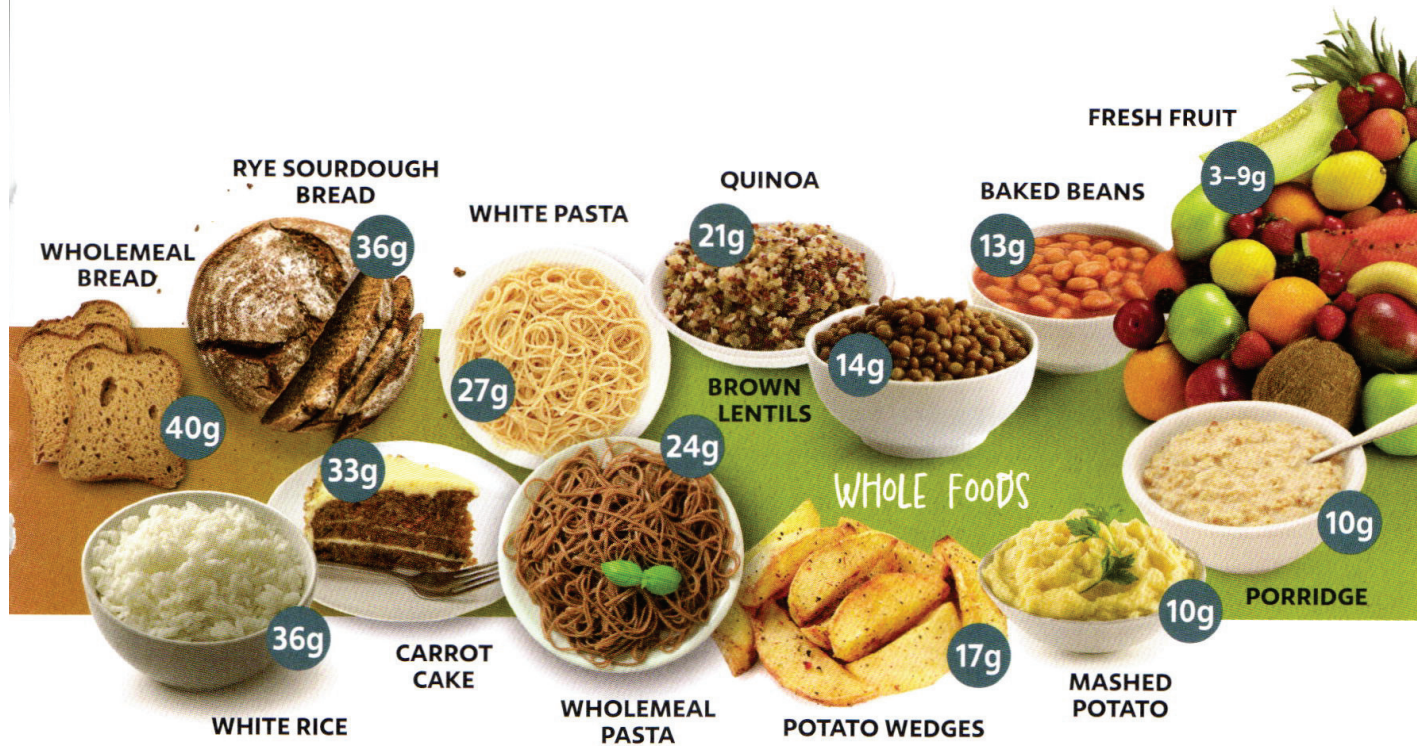
The three food groups that keep food in the stomach longer are fibre, protein, and fat. They also give the feeling of satiation, or satisfaction, preventing overeating.

Animal protein it is not a clean-burning protein. Red meat and processed meat are the most common acidic foods in the Western diet. A high dietary acid load is associated with higher risks of obesity and excess belly fat.¹¹ The state of animals today is not a healthy one, animals are often subjected to many medications, antimicrobials, environmental poisons, and growth hormones. Growth hormones, by definition, promote growth. So it's not surprising that eating meat contaminated with high levels of hormones and growth-promoting agents have the potential to cause weight gain,¹² while the introduction of antimicrobials in animal feed is a major concern

10. Adapted from nutritional data in "Calorie, Fat & Carbohydrate Counter" Colorieking.com

11. Fatahi S, et al (2021). "Associations between dietary acid load and obesity among Iranian women." *Journal of Cardiovascular and Thoracic Research*. Vol 13, issue 4:285-297. doi: 10.34172/jcvtr.2021.44.

12. Belachew B. et al, (2020). "Hormones and Hormonal Anabolics: Residues in Animal Source Food, Potential Public Health Impacts", *Journal of Food Quality*, vol 2020, Article ID 5065386.



to the disruption of normal human intestinal flora.¹³

Legumes including lentils; chickpeas; kidney; navy; and soy beans, are all slow release carbohydrates which are high in protein and fibre. These traits help people to feel fuller for longer and are beneficial in aiding weight loss. Adults who regularly eat a variety of legumes have significantly lower body weights compared with those who do not consume legumes.¹⁴

In her book, *Nourishing Traditions*, Sally Fallon investigates the way legumes were traditionally prepared, such as being soaked overnight, well rinsed, and slow cooked with several more rinses. Then, they are added to a sauce and cooked for a little longer to flavor them. This method of cooking legumes ensures their digestibility.

Nuts and seeds are high in protein and low in carbohydrates.

Legumes, nuts, and seeds can be included in every meal.

➤ **Healthy fats**

As previously mentioned, fat doesn't make you fat. The only harmful fats are those that have been changed by heat or chemicals.

Traditionally, fats were eaten from healthy cows and goats or extracted in the kitchen from plants. Olive and coconut oils are the main two that were extracted from the flesh of a plant. The oils you ate depended on where you lived and what was available.

13. Jeong SH, et al (2010) "Risk assessment of growth hormones and antimicrobial residues in meat." *Toxicological Research*. Vol 26, issue 4, pages 301-313. doi: 10.5487/TR.2010.26.4.301.

14. Polak R, Phillips EM, Campbell A. (2015) "Legumes: Health Benefits and Culinary Approaches to Increase Intake." *Clinical Diabetes*. Vol 33, issue 4, pages 198-205. doi: 10.2337/diaclin.33.4.198.

Coconut oil, palm oil, lard, and butter are saturated fats and are the most stable oils as their chemical structure is not as susceptible to damage from light, heat, and oxygen.

Unlike the saturated fats in animal products, over 50% of the fats in coconut oil are medium chain fatty acids, such as lauric acid. Coconut oil is the highest natural source of lauric acid. This natural acid can prevent and treat obesity and lower the risk of developing type 2 diabetes. These medium chain fatty acids are absorbed in the small intestine, being directly used in the body as fuel to produce energy.¹⁵

The best sources of fats are avocados, olives, nuts, seeds, coconut, and extra virgin olive oils.



MODERATION: Spelt and Kamut are two varieties of wheat grain that have not been hybridized, so they do not contain the starch structure that forces dramatic rises in blood glucose levels, but as they are in the carbohydrate class they should play a very small part in our overall food plan.

The body loves routine and functions better in every aspect when we can keep to a timetable in our daily lives. This can also influence the way our body either burns or stores our food. Rising, exercise, eating, and sleeping at roughly the same times every day allows the body to anticipate and prepare for each function, so its machinery operates smoothly. This leans toward a burning rather than storing of our fuel.

Time Restrictive Eating (TRE), sometimes called intermittent fasting, can greatly aid in weight loss. This involves eating twice a day with a six-hour break in between. Such as breakfast at 7am and lunch at 2pm, or 9am and 3pm. In his book, *Fast Diet*, Dr Michael Mosley shows why this is very beneficial.

The research is proving that this form of eating reduces body weight and blood glucose and improves insulin sensitivity in overweight patients with type 2 diabetes.¹⁶ This way of eating gives the stomach a big break between meals, allowing digestion to be more effective. When we are digesting our food effectively and efficiently, we are able to absorb more nutrients into our body. So, we burn our food rather than storing it.

"The controlling power of appetite will prove the ruin of thousands, who,

15. Boateng L, Ansong R, Owusu WB, Steiner-Asiedu M. (2016). "Coconut oil and palm oil's role in nutrition, health and national development: A review." *Ghana Medical Journal*. Vol 50, issue 3, pages 189-196. PMID: 27752194; PMCID: PMC5044790.

16. Tingting Che T, Yan C. et al (2021). "Time-restricted feeding improves blood glucose and insulin sensitivity in overweight patients with type 2 diabetes: a randomized controlled trial" *Nutrition & Metabolism* vol 18, Article number: 88. <https://doi.org/10.1186/s12986-021-00613-9>.

if they had conquered on this point, would have had the moral power to gain the victory over every other temptation.”¹⁷

Conquer appetite and you're empowered to overcome every temptation.

This brings to mind the age-old saying 'eat breakfast like a king, lunch like a queen, and dinner like a pauper.' Paupers often don't eat at all!

When we eat a large meal at the end of the day, our stomach is unable to digest the food as well as in the morning or middle of the day, as the setting sun messages the body to begin winding down to sleep. We are not able to burn the fuel as efficiently as we do in the morning or middle of the day, so the fuel consumed in the evening is often stored as fat.



EXERCISE: The most popular form of exercise today is High Intensity Interval Training (HIIT). There are a few reasons for this, and one is time. All you need is 12 minutes a day.

Body by Science by Dr Doug McGuff, *PACE* by Dr Al Sears, and *Fast Exercise* by Dr Michael Mosley are three books that show why this form of exercise is so effective for weight loss.

As the name implies, it involves periods of High Intensity (HI), usually 20–30 seconds, with a Recovery (RE) time of one to two minutes, done in six cycles.

The HI can be running, cycling, swimming, push-ups, walking fast up a steep hill, or jogging on the rebounder.

The RE is a drastic slowing down of the pace to allow recovery.

In his book, Doug McGuff takes us inside the cells and explains how HIIT sheds extra weight.

By the third HI session, our glycogen stores are depleted (these are the quick-release glucose stores in our muscle cells). In response to this, our pituitary gland releases the human growth hormone (HGH). This activates hormone-sensitive lipase, which unlocks our fat stores for use as fuel. The HGH causes the body to switch from burning glucose as fuel to burning fat as fuel. Glucose burns at four calories per gram, whereas fat burns at nine calories per gram. A calorie is a unit of energy, so fat is a high-energy fuel!

This explains why exercise is a key component in weight loss.

17. Ellen G White, *Christian Temperance and Bible Hygiene*, page 154.2.