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Carbon
The secret to beautiful spot-free skin
has been staring us in the face!

Getting on top of acne once and 4 all!

Contents.

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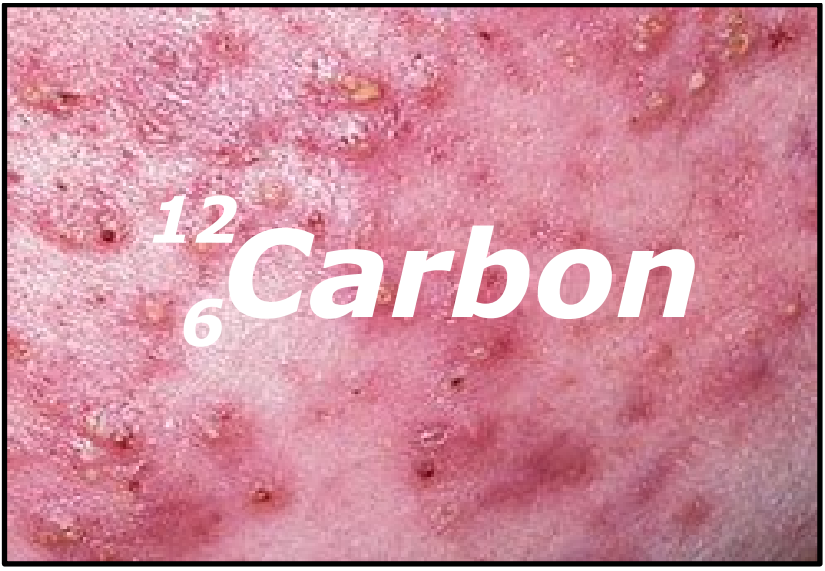
I dedicate this book to everyone trying to solve this terrible and frustrating problem once and for all.

I hope this little book will change millions of people's lives for the better. Acne is a truly terrible condition, and I hope my little contribution changes lives! Good luck to the reader!

Introduction, the nightmare of soul-destroying acne.

This book is intended to investigate the *nightmare* of acne and a staggeringly powerful and simple solution to the problem. I have suffered from mild acne since I was about 12 years old. I had pretty bad acne during my adolescence, with *whiteheads* appearing every day, but I never had *blackheads*. Most people (>90% of the human population) have some acne during this period of time due to a surge in hormones such as oestrogen and testosterone. These hormones increase the sebum production rate from the sebaceous glands in the pores of the skin. For me personally, my acne appeared day-after-day up into my late teens, when it became more manageable. Below is an image of acne vulgaris, the worst type of acne.



Getting on top of acne once and 4 all!

Let me be very clear that I am a theoretical Carbonologist and not a physician. I am writing this book because I think the medical profession has failed in its cause of solving this very common problem. And the solution turns out to be a real shocker, it's so obvious, and yet we haven't been able to see it. This often occurs in science. The answer is staring at us.

Some common general points about acne.

Acne is the most common skin condition in the world, affecting up to 50 million Americans annually, for example. Acne usually begins in puberty and affects many adolescents and young adults. Approximately 85% of people between the ages of 12 and 24 tend to experience at least minor acne. Anyone can get acne, but it is most common in teens and young adults. It is the last thing an adolescent needs, as growing up is very challenging anyway. Increases in certain hormones can cause oil glands to get bigger and make more oil. **Or it can be increased by drugs such as Valium (Diazepam), causing acne.**

These hormone levels increase during puberty. Because of this, acne is most common in adolescents and young adults. Hormone changes caused by pregnancy or by starting or stopping birth control pills can also trigger acne. For many people who have acne, this disease affects more than just their appearance. Acne can take a toll on one's emotional health. Researchers have found in study after study that people with acne can also develop severe clinical depression and anxiety disorders.

Acne is a very destructive condition, and some people also get extensive scarring for life, so it must be controlled.

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Moderate acne is defined as follows: If you have 20 to 100 whiteheads or blackheads, 15 to 50 inflamed bumps, or 30 to 125 total lesions, your acne is considered moderate. Dermatologists usually recommend prescription medication for moderate to severe acne. The methods don't always work, and people may feel lost without a solution to their problem.

However, adult men are less likely to develop acne for the first time than their female counterparts. Women bear the burden of adult-onset acne, a frustrating condition becoming more common and appearing to be linked to hormones and stress. It is also a side effect of many medications.

Are genetic factors involved? The one-word answer is yes. Acne is far more genetic than environmental. Acne genetics determine how your immune system responds to ***P. acnes*** bacteria and also sebum production; one person may develop only minor blackheads, while another develops explosive red and tender nodules. Genetics also play a role in how easily your pores clog.

Stress doesn't directly cause acne or breakouts, but it acts as a trigger for the factors contributing to acne development (excess oiliness). **Including medication such as Valium (Diazepam).**

The adrenal glands regulate stress, and when stressful situations arise, adrenal glands stimulate sebaceous (oil) glands to secrete more sebum (oil).

Stress alone isn't the cause of acne pimples – age, hormones, acne-producing bacteria and other factors are also at play – but it's evident that stress can trigger breakouts and worsen existing acne issues. It points to a stress-related hormone called CRH, or

corticotrophin-releasing hormone, as one culprit. However, it seems we are moving in circles.

While there isn't a gene mutation directly linked to acne, there is a tendency for acne to run in families. Specific genetic mutations may increase your risk of developing acne. Additionally, as some types of breakouts are hormonal, you may be genetically predisposed to producing excess androgens and sebum. I believe that pore diameter, which is genetically related, maybe the main genetic cause of acne in most people.

These bumps can be blackheads, whiteheads, pimples or cysts. Teens get acne because of the hormonal changes that come with puberty. If your parents had acne as teens, it's more likely that you will. The good news is that, for most people, acne goes away almost completely by the time they are out of their teens. **Drug side effects of psychotropics are often the cause and Valium.**

Acne is one of the most common disorders treated by dermatologists and other healthcare providers. More than 90% of the world's population is affected by acne at some point in their lives. The prevalence of acne vulgaris globally was 681 million in 2016. This was an increase of 10% from 612 million in 2006. **And the answer is a simple behavioural change!**

Incredibly all these years, all this research, all that money and yet a little time and motion study, and the problem is under control, and the science and demonstrability are good!

With a simple behavioural change and some basic chemicals, a person can gain perfect control. I will reveal the *secret* later on in this book!

But what about picking and doing self-surgery? Is this a good or bad thing? It can leave marks and scars and can even be on the OCD spectrum, which is an anxiety disorder. You can cause an infection, and you can actually make pimples worse. When you are squashing a pimple, you're often pushing sebum, bacteria and viruses back down into your skin when you squeeze.

It is not clear why some people are more prone to acne than others, although I think I know why. The exact cause of acne is not known to medicine, but androgens play a key role. Androgens increase in both boys and girls during puberty.

Androgens make the skin's oil glands get larger and make more sebum. It is the current failure of medicine to pin the cause down. This book is designed to clearly and concisely explain to people that the cause is literally in front of their faces. It's always diet, dairy, various vitamins, either a deficiency or too much, iodine, wheat, and gluten. The list is endless.

But this doesn't solve the problem. All it does is clearly show that the true underlying reason why people get acne is nothing to do with any substance or stress effects, but it simply comes down to our daily behaviour. And modifying that behaviour will ultimately solve the problem. It is ridiculous, to say the least, that if dermatologists had simply sat down and observed a person with acne, the answer would be very clear. Often in science, we can go down useless pathways, overthinking what is going on and missing the obvious cause of the problem in the first place. Diet is a little irrelevant to acne as acne is simply a **skin infection**.

Dermatologists should have nailed this down!

Important notice about accuracy in biology.

As a scientist, things are either likely or unlikely; that's how I see the Universe. So, I am not saying this will cure your acne completely. That would mean wiping ***Propionibacterium acnes*** off planet Earth, and that's not going to happen. Incidentally, even if you could, in theoretical physics, you still wouldn't be out of the woods to claim a 100% cure. ***Propionibacterium acnes*** could still exist somewhere else in the Universe. We can, however, reduce the probability of an infected pore or spot coming about by simply identifying the septic vector and minimising its influence at source through behaviour. This behavioural change seems somewhat self-evident, but I don't claim 100% effective; no scientist can. I hope for around 90–99% effective with this particular formula and frequency if followed carefully and diligently.

What are dermatologists doing? The answer should be so clear to them, but why isn't it?

In other words, I am sick and tired of hearing dermatologists talking about this and still failing to find a solution. So, I am literally taking things into my own hands as I am fed up with this whole affair. Sometimes physicians simply don't know and don't fully understand what is going on with a medical problem, and acne is a big failure in dermatology because, as you will see, the

solution is ridiculously simple. Although it has taken me over 30 years to pin it down myself, I always said if I ever found the solution, I would write a book about it because I know how devastating this is to people's lives, and I want to help as many people as I can. In my early 20s, it became rarer, but it never went away, and in any given week, I would have one or two spots, mainly around my mouth and on my neck.

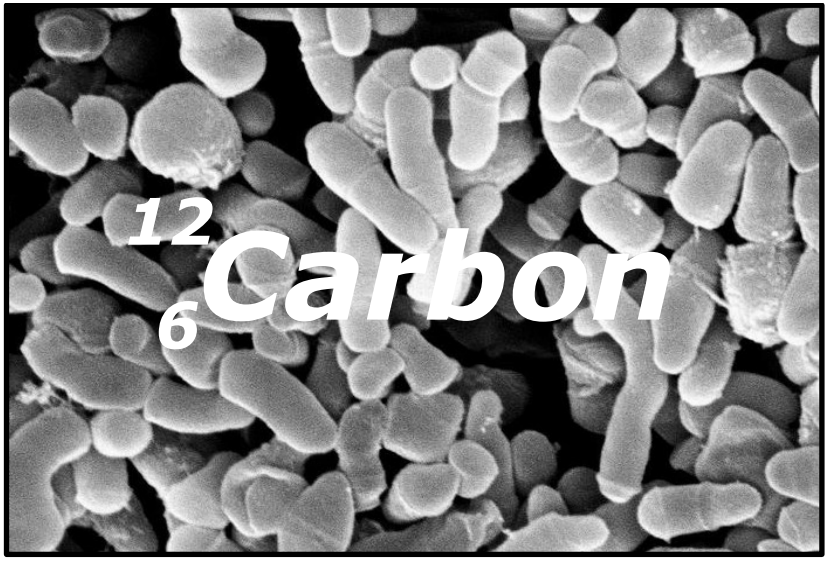
I suffer from in-growing whiskers, which also produce spots. As a man, these problems are often worse because a man's face is very active every day as whiskers grow and can trap bugs, causing spots. I used to get spots on my face, back, and a few on my legs, and it drove me insane. When I was 26, I was diagnosed with bipolar affective disorder. I was put on lithium carbonate, and within a few days, I woke up to terrible acne all over my face. The addition of other drugs made it even worse (Valium), and my adult acne became a permanent daily problem again.

I thought I had moved away from this problem, but it came back with a vengeance. One of the main side effects of psychotropic and anxiolytic medication **(Valium)** is the emergence of acne, either whiteheads or blackheads. Over the years, I tried just about everything to try to control it, but it wouldn't go away.

Bear in mind the following important point:

- A spot is an infection with a bacteria called ***Propionibacterium acnes***, a gram-positive human skin commensal that prefers anaerobic (oxygen-free) growth conditions. It is involved in the pathogenesis of acne (Kirschbaum and Kligman, 1963). Acne is the most common skin disease in the whole world,

affecting more than 50 million individuals in the United States alone. See below!



So, I knew I had a skin infection, so I employed skin disinfectants and acne products to try to control it. I would try one of the products and see an improvement for a day or two, and then I would return to square one.

It was so frustrating, and I took baths in skin disinfectant. By the way, I am a theoretical Carbonologist with three decades of experience in science. I have worked in the pharmaceutical industry for 17 years. I have done cancer research and worked in biotechnology, pharmaceutical science, analytical chemistry, biochemical engineering, biomedical technology, biochemistry, microbiology, molecular biology, pharmaceutical manufacturing and genetics. So, as a very experienced Carbonologist, I wanted to find a solution to my acne once and for all. I kept on trying lots

of different chemical agents and avoiding certain foods. I even tried to use dilute bleach (not recommended). So, spots are a bacterial infection of the skin, and I drove myself insane trying to gain control of it. This went on for decades, and occasionally I would see an improvement, but this would only last for a day or two, and then I was back to square one.

Bear in mind that acne is often genetically predisposed. What I think happens here is that people who are more prone to acne have very broad skin pores. Or, at the very least, the pore's opening is very wide. The wider the pore, the bigger the surface area, which makes it easier for bacteria to fall in. Some people's pores are so large that you can clearly see them with the naked eye. So, such people tend to get dirt, dead skin, sebum, and bacteria in these huge pores (blackheads).

So, for these people, including myself, the problem is genetic in this anatomical way. The Internet is awash with all sorts of positions on this matter, with no clear solution.

I was very disappointed with the advice from dermatologists, and it seemed that they didn't have a solution. The bottom line here is that I suspected there was a straightforward solution, as this is an infection! As someone who has worked in microbiology, I thought I must be able to sort this out once and for all. I tried many protocols of treatment, but nothing worked. Some of the chemicals I used severely affected my skin and caused chemical burns and flaking skin. It was horrible and literally drove me crazy. I talked to my doctor about it, and she said to take the cleansing products on sale over the counter to stop this. I told her I had tried pretty much everything, but nothing worked. She

held up her hands and said she had no idea. All the way through the decades of this, I kept thinking I needed to get to the bottom of it. My acne was very, very mild, and the people around me probably didn't even notice it. Being a Carbonologist drove me to keep looking for an answer, not that my own problem was as bad as it wasn't. But it kept on bugging me daily, so I stuck with it and kept looking for a solution. It's one of those conditions where you are more aware of the problem than others are. But that doesn't make things better. There was probably a very simple answer to this whole affair. I checked the Internet and found a huge set of variables with people doing extraordinary things like using *tomato ketchup* and dietary changes. But nothing worked, so I looked into the pathology of the bacterium ***Propionibacterium acnes***. This organism looks like little grains of rice; we call this type of bacteria a *bacillus*. This organism lives on the skin but actually loves an oxygen-free environment, and it is anaerobic.

These organisms are usually found all over the entire body, but they appear in greater numbers around moist skin areas. So, the face, palms of the hands and the soles of the feet.

We are constantly living with this organism. So, when people get spots, it is usually an imbalance of flora and fauna on the skin's surface.

The natural microbiological equilibrium isn't balanced, resulting in acne.

So, the pathology of infection is simple:

Getting on top of acne once and 4 all!

1. A ***Propionibacterium acnes*** bacillus falls into an open skin pore from a mechanical vector such as a hand.
2. It falls below the level of the sebaceous gland.
3. The pore produces sebum which fills the pore.
4. Oxygen is displaced in the pore by the sebum.
5. The bacteria are deeply positioned in the pore.
6. The bacteria have an oxygen-free zone, which is what they like.
7. They feed on the sebum and multiply like crazy, filling the pore.
8. The immune system detects them and responds.
9. The response is to direct a large number of lymphocytes (white immune cells) into the area, fighting the infection.
10. The pore becomes filled with sebum, bacteria and dead skin cells, blocking the pore and producing the spot.
11. The white immune cells devour the bacteria and die, producing puss.
12. The pore swells up, and blood pools around the spot, making the edge red and sore.
13. A person sees the spot and pops it by squeezing the tissue around it.
14. The burst spot releases bacteria onto the skin's surface.
15. If the person doesn't use antibacterial agents to clean the area, the bacteria fall into pores around the spot, infecting them.
16. With more pores infected, we move into a *breakout* that worsens.
17. We are in the full breakout phase now!

18. The person enters a terrible stage where the breakout spreads out all over the skin, and we have a *grotesque* nightmare on our hands.

At this point, the skin is livid with the ***Propionibacterium acnes*** bacillus infection. The whole skin area becomes horribly red and sore, and the person feels ugly and loses confidence in social situations. It's a disfiguring and life-destroying state of affairs that needs stopping once and for all. I have to say I have been lucky to have not had the worst form of this type of acne, namely acne vulgaris. At this point, a GP can only give the patient an antibiotic to try to wipe the ***Propionibacterium acnes*** away and sterilise the skin. This is only a short-term solution as it doesn't stop the infections in the future; it clears them now, but there is no real procedure for treating the skin after an antibiotic has been employed. As a result, the spots return in no time. An antibiotic is excellent for clearing the skin and sterilising it. Still, dermatologists recommend no aftercare that stops the return of the infection, and something is amiss with this. Usually, the first choice for treating acne is Tetracycline, Minocycline, Doxycycline, or a Macrolide. Oral antibiotics should be used for the shortest time possible to prevent antibiotic resistance. Oral antibiotics are best used with topical retinoids and benzoyl peroxide. At the end of the day, this is only a short-term solution, but it needs to be more thoroughly evaluated. Trawling the Internet for years and looking for the secret to all this drove me crazy. My adult acne in my 30s and 40s was very mild, but for me, it appears around my mouth and on my neck. Spots can appear anywhere on my face, and most people I know have probably never really seen it in me. I would clean the area, and sometimes I used a basic concealer

to allow me to go out. This is not a great solution as these powders and other similar cosmetics block pores, and you get more spots.

After all these decades of searching, the bottom line was that no one had ever pinpointed why people get acne. Yes, we know about large pore diameters and ***Propionibacterium acnes***, but we still haven't gotten to the bottom of this whole affair. So, what is the *secret*?

Sebum and plugs, oxygen displacement, anaerobic sepsis.

So, what is sebum? Sebum is defined as:

An oily secretion of the sebaceous glands.

The oil is produced from the sebaceous gland in the pore around the hair follicle and acts in the following ways:

- ✓ **Surface lubrication.**
- ✓ **Prevents drying of the skin.**
- ✓ **It produces a waterproof barrier.**
- ✓ **Prevents loss of heat and water.**
- ✓ **Antimicrobial properties.**
- ✓ **Pro-inflammatory.**
- ✓ **Anti-inflammatory.**
- ✓ **Transports pheromones to the surface.**