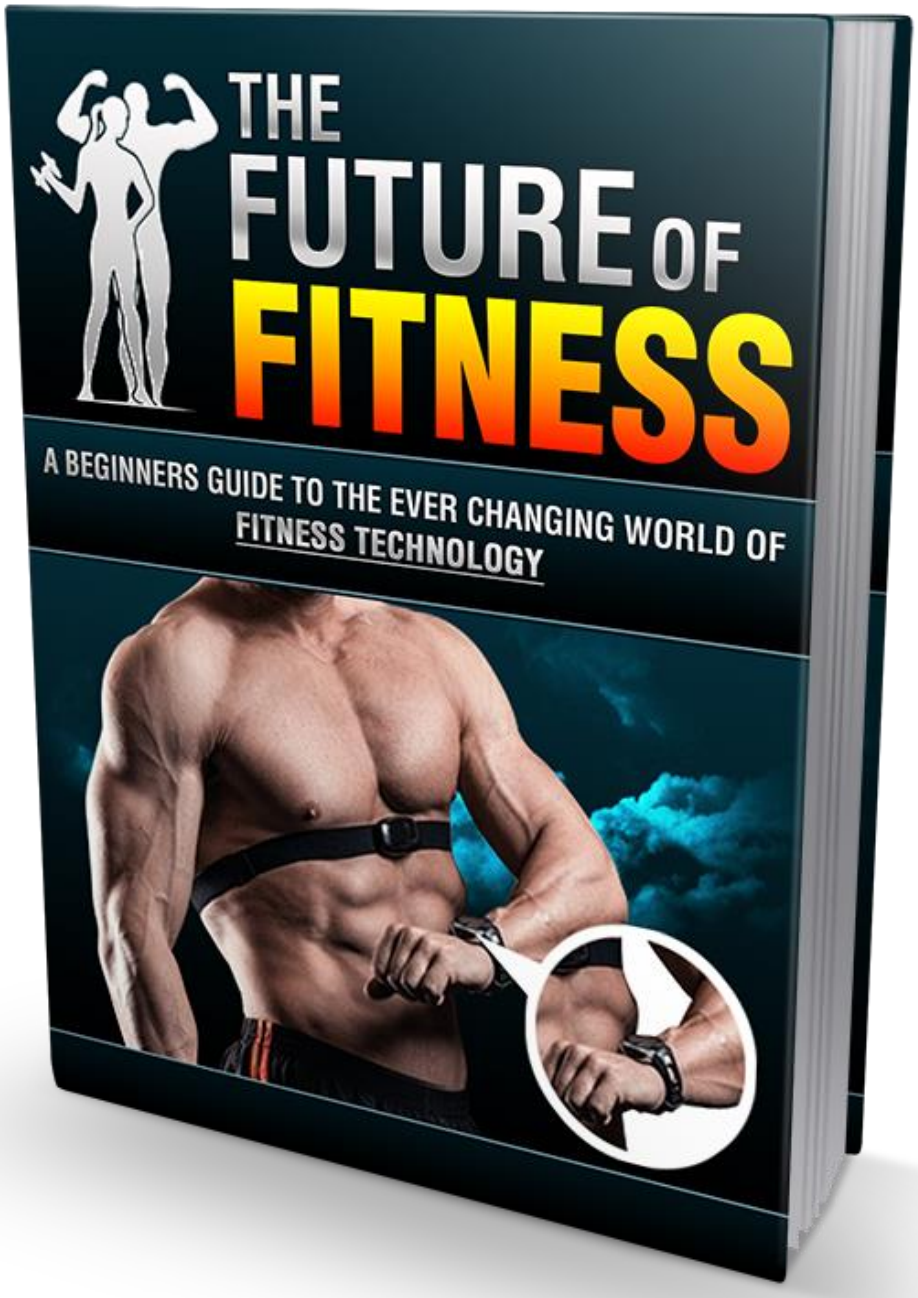

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Contents

Introduction – Why Are We In Need Of Fitness?

Firstly welcome to our beginners guide on the future of fitness and wearable technology, I just want to say thank you for joining me as we embark on a quick journey of discovery into this ever changing landscape of technological advancement. In this first introductory chapter we will be going over why we are in need of fitness and how technology is/will play a huge part in getting us fit. Let's get started…

First and foremost, here we are, living in an era where fast food meals that are rich in fat are available on every corner and advertised on every platform available. There's no wonder more and more people are suffering from obesity. Obesity, in the dictionary, is defined as

"The condition of being very fat or overweight; corpulence."

There are dire consequences for those that are morbidly obese. Take a look at the facts and figures about obesity throughout the world …

According to the World Health Organization (WHO), obesity rates worldwide have doubled between 1980 and 2008. In 2014, 39% of adults aged 18 and over worldwide were overweight (about 2 billion) with 19% of them considered obese (estimated 1 billion people).

Obesity statistics in children is just as disturbing. WHO revealed that the number of overweight and obese children under five years old has risen to 41 million, from 31 million in 1990.

How is obesity measured?

It is measured using BMI, or the Body Mass Index. This can be calculated by taking the weight of the individual in kg and dividing it by his or her height in meters. Mind you, this isn't going to distinguish weight that is associated with muscle from

weight associated with fat. Therefore, with those thoughts in mind, the BMI provides an uncalculated measure of fatness. So, the BMI is considered a "rough guide," because it doesn't correspond to the same degree of fatness in every person.

An individual that has a BMI that is larger than 25 is "overweight." However, if an individual has a BMI that is 30, they are considered obese.

Obesity is one of the leading causes of preventable death. A clinically obese child or adult is at risk of high cholesterol, high blood pressure, heart disease, stroke, type 2 diabetes, joint problems, cancer, depression and breathing difficulties.

Probably the light beneath all these dreadful facts is that obesity can be reversed…especially with the help of fitness technology!

Unlike those suffering from other diseases, an obese child or adult can fight obesity by prioritizing health and fitness before it

becomes too late. If you or anyone you know is suffering from obesity, here are 5 main ways to reverse its effects:

1) **Remove sugar, salt and saturated fat** – A high intake of salt, sugar and saturated fat all contribute to obesity. WHO has dropped its recommended fat (53 grams/day), sugar (25 grams/day), salt intake (5 grams/day) to help reduce the global population's risk of diabetes and obesity.

2) **Get enough sleep and control stress levels** – Lack of sleep and chronic stress are the leading causes of insulin imbalance and weight gain. Poor sleeping patterns have been linked to damaged metabolism and increased cravings in carbohydrates and sugar. Religiously sticking to at least 8 hours of uninterrupted sleep, paired with activities that promote relaxation (yoga, meditation, massage, etc.) could help reverse the effects of Type 2 diabetes.

3) **Get educated about nutrition** – Food is the body's fuel that enables us to think and perform day-to-day tasks, but it is important to be mindful of food choices. Aside from maintaining

WHO-recommended fat, sugar and salt intake, adding whole unprocessed foods (such as vegetables, fruits, and nuts) to the diet can prevent insulin resistance and in turn help reverse obesity. The right set of multivitamins and supplements can also promote proper metabolizing of fat and sugar. If you are unsure of the diet and supplements suitable for you, it is best to seek advice from a nutritionist.

4) **Exercise** – Any physical activity, may it be walking for several hours or performing high-intensity interval training for 30 minutes, is better than nothing. Make sure to get the heart rate up whenever you exercise.

5) **Measure progress** – Many studies have shown that people who track their diet and exercise progress with a notebook or spreadsheet lose twice as much weight. Self-monitoring had been a tedious task, since BMI measurements, calorie intake, and physical activities are logged in manually, but fitness phone apps made it much easier. Now with fitness trackers that can monitor everything from steps, distance ran, speed, estimated calories burned, and even sleeping patterns, self-monitoring provides much more motivation than ever.

Anyone who has been diagnosed with obesity may find the situation bleak, but this shouldn't be the case. Changes in lifestyle, diet, and fitness could help prevent or revert the effects of obesity and with the aid of fitness technology the obesity situation may be easier to beat than ever!

Well that's a basic introduction into the current obesity situation in the world and why we need fitness and health. Over the next few chapters we will take a more in depth look at what wearable tech is, how it can aid fitness and how it affects you. Are you ready? Let's go…

Chapter 1 – What Exactly Is Wearable Tech? Should I Use It?

Firstly we must ask the question…what exactly is wearable technology? Wearable techs, short for wearable technology, are gadgets or devices, which are worn on body parts, along with clothes and other accessories to help the wearer perform various functions that can be performed on our computers and phones while on the go.

These gadgets usually include a type of tracking technology (such as motion sensors) that monitors various data such as heart rate, sleeping patterns, physical activity (steps, performance, etc.), and various other useful information.

Wearable tech has plenty of applications and can benefit people of all ages suffering from:

- **Obesity** – The biggest industry wearables have infiltrated is health and fitness. Today, you can find a bracelet, sports bra, jewelry, watch, belt, and other items that have been programmed to monitor physical activities, work as a pedometer, provide coaching, measure calorie intake and burned, and track other bodily functions.

Popular wearable fitness trackers like FitBit and JawBone have helped users get motivated with exercise. Meanwhile, obese kids can make losing weight fun with various game-type wearables that promote being active, offer challenges, and allow them to play against other kids.

- **Insomnia and Sleep Apnea** – Sleep is an important part of fitness, so wearable devices that monitor the quality of a person's sleep can be a huge help. Neuro:On, Luciding, ActiGraph, Fatigue Science RediBand, FraSen Inc. Sleep Mask, and Sleep Image are devices with a full list of sleep data analysis that can help people suffering from insomnia and sleep apnea.

Fitness trackers like Garmin VivoSmart and UP3 by Jawbone, which are equipped with sleep monitors, are great for users who also want to prioritize their health. The Kokoon in-ear sleep headphones were designed to actually improve a person's sleep quality, but it will only be released in late 2016.

- **Aging-associated diseases** – Older adults who are suffering from aging associated diseases such as cataract, diabetes, hypertension, arthritis, and cardiovascular disease (among others) can also find wearables very useful. For instance, the BodyGuardian Sensor can perform cardiac ECG and rhythm monitoring to patients and deliver results to their respective physicians.

- **Back problems** – Devices like UPRIGHT and Lumo Lift remind people about posture, which is the leading cause of unnecessary back pain. Valedo works by strengthening muscles to prevent lower back pain, while Cur claims to eliminate back pain by using electrical stimulation right at the source.

- **Asthma** – Health Care Originals developed Intelligent Asthma Management, a wearable that helps in detecting symptoms, reminding about a physician's treatment plans, and other features to help manage asthma.

- **Diabetes** – Google Life Sciences revealed an ambitious project that can possibly help in reversing the effects of diabetes. Verily is a contact lens that detects glucose levels.

Wearable tech can also be useful to people who are perfectly healthy, but want to level-up their performance with sports, exercise, and weight training, among other physical activities.

Sports fans would go wild with wearables that could provide real-time stats of a game and accurate performance measurements of players.

In some instances, wearable tech can help save lives, promote a healthier lifestyle and prevent diseases.

Chapter 2 – The Evolution & History Of The Wearable Device

Wearable technology may be all the buzz in 2016, but the process of adding technology to day-to-day life has been done for centuries. According to Giordano da Rivalto, the earliest "smartglass" was commissioned by Roman Emperor Nero. The glasses were made of a metal frame and emerald lens, which reportedly helped in improving Nero's eyesight during fights from 54 AD to 68 AD.

In 17th-century China, the oldest smart ring was designed with the smallest abacus you'll ever see.

In 1884 New York, Cute Circuit's Electric Girls showed off one of the first applications of wearables in the fashion industry. Electric lights were embedded on a group of ballerinas' clothing.

In 1907 Germany, Julius Neubronner invented the first GoPro-looking device and the sub-niche Pigeon Photography. He fitted several pigeons with an aluminum breast harness, which holds a miniature camera with timer mechanism that captures a single aerial-view photo.

By the early 1960s, the term wearable tech has not been coined yet, but has been applied in countless inventions. Two MIT professors, Edward Thorp and Claude Shannon, designed, constructed, and tested the world's first wearable computer that could predict the outcome of roulette. The device consisted of two main parts – a timing device concealed in a shoe, and a cigarette pack. Thorp and Shannon were so successful that their winning bets increased to 44% and led to Nevada passing a law that prohibited similar machines in 1985.

Also in the 60s, the oldest HUD (head-up display) and virtual reality wearable devices were created by one person. In 1960, Cinematographer Morton Heilig invented a bulky chest-worn device called stereophonic television Head-Mounted Display (HMD), which combined his love for cinema with virtual reality. Two years later, he patented the VR simulator 4DX-like gadget he

called "Sensorama Simulator" that consists of a vibrating seat, stereo speakers, handlebars, special effects like air blower, and a headset that generates certain odors to match the film's scene.

In the last quarter of 1975, Pulsar sold 100 limited edition 'wristwatch calculators,' which were made with 18-karat solid gold and priced $3,950 a pop.

In July 1979, Sony released the brand's historical 'Walkman,' its first portable cassette-tape player.

A high school student in the early 80s by the name of Steve Mann developed the first backpack computer with a camera viewfinder CRT equipped on the headset. Mann would go on to invent and pioneer many wearable tech related to photography, such as the first wearable wireless webcam in 1994.

The X-games have a lot to thank mountain biker Mark Schulze, who installed a videocam to his helmet that led to the 1988

instructional videotape entitled "The Great Mountain Biking Video," ahead of many GoPro enthusiasts all over YouTube.

From 2000 onwards, many wearable tech has popped up, from Bluetooth headsets to the 100% digital pacemaker Vitatron C-Series. The boom in fitness wearables can be traced back to Nike and Apple's collaboration of a fitness-tracking iPod, which is the inspiration behind FitBit's first wearable fitness gadget. By 2012, one of the most popular Kickstarter success stories went to The Pebble customizable smartwatch after the founders made over $10 million.

When Google Glass was revealed in 2013, the rest was history. Every brand in mobile phones, fitness, IT, sports, entertainment, and other industries wanted to release a wearable device from then on, which is why 2014 was dubbed the "Year of the Wearable."

Chapter 3 – Different Types Of Wearable Technology & Are They Safe?

In this chapter we will look at some of the wearable techs which are projected to take over the technology industry as the need for smaller and easy to carry computers are in demand and whether they are safe to use or not

Wearable Smart Glasses

These are glasses embedded with some microchips that are worn on the face to help the wearer perform some tasks without being noticed. It can help take pictures, take video coverage, to magnify objects, to improve sight and can be used as an industrial glass for detection.

There are a number of wearable smart glasses that are recently trending, which include Google glass, Vuzix M100, Recon jet, GlassUp, Meta Pro, Epson & Moverio

Smart Watches

A smartwatch is a device worn on the wrist, which has a touch screen display that can be connected to your smartphone through Bluetooth, which keeps you updated on the digital networks of your phone such as notification of incoming calls, emails and various notifications from the applications you work with, track daily activities and more

Some of the most talked about smartwatches in the market today are Apple watch, TAG Heuer Smartwatch, Pebble Time, etc.

Fitness Trackers

These are sophisticated wristbands or watches, which are produced to help you track and count your fitness activities. They tell you how much distance you have covered in your walk or run, amount of calories burned, when you are not correctly seated, the amount of calories you have consumed, monitor your heart

rate, etc. They usually come in different styles, shapes, colors and sizes.

Smart Clothing

These are clothes embedded with small sensors which are designed to help check and provide feedback on your health, fitness and sporting activities. They were also worn by the military in war fronts to provide a kind of health and emergency relief to soldiers when hurt or in danger. This clothing was usually hard and heavy and cannot be worn in normal circumstances. In recent years, there has been innovations on more fashionable and comfortable smart clothes.

Recent smart clothes include Project jacquard by Google, Athos; a medical tech clothing, designed for Gyms. MBody Bike & Run for runners and cyclists. Sensoria running socks; used to track time, distance and pace of runs. Synapse smart dress; which sets a blue light alert when someone gets close, B Maternity; a health tracking maternity gown for pregnant women, Climachill by Adidas; used to make the wearer feel cold while running.

Smart Jewelry

Smart jewelries are exceptionally designed jewelries like necklaces, rings, bracelets and some wristwatches that are fashionable and trendy which like the others are embedded with a small device that can notify and track events.

Trendy smart jewelries include; Altruis, Bellabeat LEAF for tracking stress levels, Shine by Misfit Swarovski; which tracks activities and monitors sleep, Ear-O-Smart; an earring that tracks activities, calories and heart beat levels, Arc Pendant for men; used by cyclists to navigate through streets, Opening ceremony MICA, Tory Burch & Fitbit, Ringly, and so many others.

Implanted Devices

These are devices implanted under the skin mostly for medical reasons, such as insulin pumps, the retinal implants, magnetic sensors, smart drugs, etc. Many proponents believe these implantation devices might become part of the human body in near future.

How Safe Are These Wearable techs.

There has been a great deal of contention as to the potential health hazards of these wearable gadgets. It is a well-known fact that some low level radiating mobile phones can cause some health problems, how much more then would an electronic device that is worn very close to the body for a long time not cause even more serious harm to their users.

Most researchers have confirmed this fact, while some have refuted it with heavy research to prove their stance. Nevertheless, a panel of the World Health Organization (WHO) has confirmed in a recent research carried out in 2011, that there is a possibility that mobile devices which have radio waves, can cause health problems and that it is best that cellphones are kept far away from the body to avoid this possibility.

On this note, why then do we have these inventions of wearable gadgets that are placed on the body? If cellphones are likely to be harmful to the human health, it is also possible that wearable

tech can cause even more harm since they carry the same electronic radiation as cell phones.

Nevertheless, there are so many advantages that can be derived from these wearable techs, as earlier sighted and since most wearable techs make use of Bluetooth, and Bluetooth uses a lower level of radio waves, then wearable techs might very well be safer than cellphones

Chapter 4 – The Benefits Of Wearing Technology Over Not Wearing It

Wearables are applied in so many industries that the usefulness of these devices range from the ability to save a life, to monitoring a basketball player's performance while watching a game live. Below is a quick summary of how the pros outweigh the cons when it comes to using wearables on various sectors:

Medical

Medical-grade, FDA-cleared wearables provide patients with unobtrusive ways to monitor vital signs and various health conditions. For example, a "smart pill" released by Proteus Digital Health monitors if someone has taken his/her medicine for the day, which can be a life-or-death situation for older adults who may have memory problems. There are other similar devices for managing pain, diabetes, heart health, and more.

Communications and Security

Wearables can go beyond just instant messaging and connecting with people in social media networks. Wearing a tracking device that looks like any ordinary bracelet or watch could help find missing kids or senior loved ones with memory problems. Some gadgets are also equipped with a one-push 911 call that is irreplaceable during emergencies.

Sports and Wellness

Gone are the days when fitness trackers are just fancy pedometers. Today, fitness wearables are so advanced that they can monitor vital signs in real-time, determine sleep quality, and correct bad posture – all of which contribute to good health.

In sports, a wearable tech device can serve as a virtual coach and enhance performance of athletes by monitoring every movement made while training.

Whether used for wellness or athletic performance, wearables provide customizable information that can be monitored by a trainer, physician, nutritionist, and other medical professionals.

Business

In the corporate world, using wearables in the workplace has increased productivity, engagement, and collaboration between employees. While security issues can be a problem for wearable tech, this can be solved by ensuring any gadget used for business has cloud-based security solutions.

Lifestyle Computing

The world of gaming will never be the same with the comeback of virtual reality and awe-inspiring VR systems like the Virtuix Omni™, which consists of a gun, belt, VR headset and platform. There's an Open Source VR from Razor, Sony's Project Morpheus made specifically for the PlayStation 4, and the Tesla Suit, among many other revolutionary inventions.

Chapter 5 – Things to Consider Before Investing

Just as you wouldn't go out and purchase the first phone you come across, without doing some research, you shouldn't go out and purchase the first fitness wearable tech you come across solely because you like the style of it. In this chapter, we are going to cover the things to consider before investing in fitness wearable tech …

Price

While many tech brands are trying to drag the price of their devices down, majority of consumers are still unwilling to invest on a gadget over $300. Determine how much you are ready to spend for a particular device. Of course, price usually goes hand-in-hand with how useful a gadget is to your specific situation. Will it be able to save your life? Can it help you lose weight? Would it organize your daily tasks? Could it simplify communications?

Brand and model

Many wearable devices fall under the category "fitness tracker," but each one offers different features. For instance, the FitBit Charge HR is known for its heart rate monitoring, while the Jawbone UP3 has one of the best sleep-tracking feature of all current devices. If you check out FitBit Alta, this stylish bracelet-like device only has basic fitness-tracking features without heart rate monitoring.

Design/Wearability

Design is an important factor because you will be wearing majority of these gadgets daily. Generally, the wearable device has to be comfortable. Most watch-type fitness wearables are made from a type of rubber and have either a strap or clasp to adjust the band. Others are designed to look like any ordinary watch, jewelry, or wristband.

Battery Life

It is important to determine how long a wearable device can go before it needs to be recharged. This is particularly important if you're going on a long run or hike. Be aware that maintaining a gadget's battery can become a task in the long-term. Are you willing to add another device to charge daily, along with your smartphone, tablet, laptop, etc.? Fitness trackers often last for months, such as Fitbit Zip (up to 6 months) and Garmin Vivofit (over a year), while smartwatches like Samsung Gear can last up to 24 hours.

Data Security

One of the most important things to consider is how secured your personal data will be once you connect a device to a third-party website or app. Brands take full responsibility with the security of every personal information you provide, so it is best to choose popular brands that are known for continuously testing their products.

Compatibility with other devices

Determine if the wearable device you plan to buy is compatible with your existing devices. Generally, the Apple Watch requires iPhone 5 or newer, while Android-based smartwatches won't work on any iPhone. Are you willing to replace some of your existing devices for a wearable?

These 6 important considerations will help you decide if a wearable device is appropriate for your situation or not, or ensure you buy the best one to fit your needs.

Chapter 6 – Comparing Wearable Tech & Smartphone Apps

One of the most-asked questions about wearable tech is:

What does it have to offer that a smartphone with various apps cannot?

It's a perfectly normal question, since buying a new device that would only duplicate features of your existing gadgets seem like a waste of investment.

When it comes to tracking steps, it has been proven in a 2015 experiment published in the Journal of the American Medical Association that six of the most popular fitness-tracking devices provide the same results as four of the top fitness smartphone apps. However, this study only focused on the pedometer feature of wearables and apps.

Wearables with sleep tracking work mostly the same as smartphones with sleep-tracking apps. Users have to push a

button to "tell" the device you're off to bed. The advantage of wearable tech in this case is that it provides more information, such as quality of sleep (Fatigue Science), dreams (Luciding), or sleep waves and muscle tension during sleep (Neuro:On).

In health, there is no smartphone app that could help monitor the user's glucose levels (Google's Verily glass), pain management (Quell Relief and Cur), nausea (ReliefBand), asthma (Health Care Originals Intelligent Asthma Management), back problems (UPRIGHT and Lumo Lift), muscle pain in the lower back (Valedo), and other specific health conditions.

There are numerous wearable tech devices designed for sports performance that smartphone apps cannot beat. For instance, the vest-like Catapult is used by many NFL teams to monitor heart rate, speed, and other 100+ metrics of athletes to prevent injury during workouts or a game. The three-piece Athos set, used by NBA players, is designed to monitor muscle data, breathing, and heart rate in real time.

In other instances, wearables and smartphone apps are used together to create a one-of-a-kind system. Ford's Valencia, Spain plant was the first to adapt the Portable Quality Assurance Device, a smartphone-type device worn on the wrist, as part of day-to-day QA tasks. It worked with a smartphone app and has saved workers a 1-kilometer daily walk by completely doing away with the production line's paper-based system.

Comparing wearable tech and smartphone apps is tricky, since both can be useful to consumers. The great thing is that with the rise of wearables, smartphone companies are trying to up their game and include built-in features to match wearable tech. On the other hand, wearable tech brands are thinking outside of the box to provide a need that no smartphone app could offer. If you think about it, the situation is a win-win for consumers, whether they choose a wearable device or a stick with their smartphones' apps.

Chapter 7 – Avoiding Common Beginner Mistakes with Wearable Tech

Wearable tech is so much more than just a fitness tracker. This technology has been adapted into a wide range of applications over varying sectors from IT to fashion, sports to security, communications to medicine, and many more. Below are 7 of the most common beginner mistakes consumers make when it comes to wearable tech:

Did Not Enter Personal Info

Wearable devices often provide users with an online account or access to apps where data can be monitored. While sharing personal data can be tricky to anyone who values security, adding your information actually helps you maximize the potential of your device. This is particularly true for fitness trackers with advanced features like calorie consumed/burned, since your weight, height, and other vitals are calculated along with new metrics.

Assume All Wearables Provide 100% Accurate Results

Not all wearable gadgets are created equal. For instance, medical-grade fitness tracking may be able to provide 100% accurate results, but other non FDA-cleared trackers may have problems with accuracy. The key to find devices with respectable accuracy of data is to check which devices were tested, validated or certified by a third-party organization, such as a university or testing lab.

Did Not Set-Up Or Calibrate The Device

Although most manufacturers tell users that calibrating a device is optional, some inaccuracies of wearable data can simply be solved by checking out the unit's settings.

Not Doing Your Research

This is one of the biggest mistakes out there.

Look at this scenario – an individual decides they want to change their lifestyle and become more active. In order to do this, they'd like to go for one of those nice gadgets that help keep track of calories burned, steps taken, heart rate, and all of that beautiful stuff. They don't know what they're doing, all they know is that they want one. So, with those thoughts in mind, they go out and purchase the first one they come across.

That right there is one of the mistakes you should avoid. Never go out and purchase wearable tech before you do research. When you research, you need to learn about the features, the data, the battery, and the whole nine yards.

Asking a Sales Representative

You should never ask a sales representative what the best one is. They will probably give you false advice and lead you towards what THEY want you to buy.

Set Unrealistic Goals

Whether you are looking for fitness wearables that could potentially help you lose weight, or a device that could streamline your daily communication, it is important that you set realistic goals.

At the end of the day, these gadgets are just gadgets. If you are trying to shed pounds, you still have to work on it and not just rely on your device. If you are aiming to reduce the number of gadgets you use for social network, e-mails, and other tasks, it will still be your decision if you're going to stick to just your smartwatch or other type of wearable tech. Of course, this doesn't pertain to medical wearables and implantables that were designed to prevent pain, manage diseases, or even save a life.

Mistakes The Term 'Water Resistant'

When it comes to fitness trackers, manufacturers often state if the device is water-proof. However, this can be tricky to interpret since some gadgets will be perfectly fine getting wet, but will be damaged if submerged in water. Other devices are made

specifically to be used even while taking a shower or swimming. It is important to identify how well the device does under water, or if not at all.

These 7 common mistakes can be avoided by proper research before buying any wearable device. Avoiding these mistakes not only allow users to maximize the potential of the gadget, but also extend the life of a wearable tech.

Chapter 8 – Making Wearable Tech Part Of Everyday Life

So many people purchase wearable tech devices with the thoughts of changing their life in mind. They use it for two days, maybe even two weeks, before they stuff it in the bottom of a drawer and forget about it completely. Is that what you want to do? No, of course not.

Once you purchase the device, you want to make use of it every single day for as long as possible. This is, after all, a device that is supposed to help you get your life back in shape, right? So what good will it do in the bottom of your drawer? You need to learn how to make wearable tech part of everyday life.

Make it a Habit

This type of habit right here is a good habit – you need to make grabbing your wearable tech device a habit. Think about it, back

in the day, when you first got your phone, weren't there times where you would leave it behind by accident? Now, you probably could never imagine yourself without that phone by your side. If you make using that wearable device a habit, there will come a time when you could never imagine yourself without the device.

Set Goals and Keep Them

Set goals to make the wearable device a part of your everyday life and stick to those goals. If you have decided that a wearable device could make your life so much easier, it can become a part of everyday life as smartphones have.

Tips To Make Fitness Tech Part Of Your Life

A fitness tracker with sleep-monitoring, pedometer, and heart rate functions can become your motivation for a major lifestyle change. By turning the sleep function on and off every time you sleep and wake up, you'll be able to follow a much healthier sleeping pattern through the sleep data you'll be recording. The

pedometer function will let you see if you are reaching over 10,000 steps/day, which is the recommended daily activity anyone should follow.

For medical-grade wearables designed to monitor health problems, integrating these devices into the daily routine is crucial. If you have cardiovascular disease that needs regular monitoring, you should remember to wear the device on your chest (Polar H7), as a patch (Monica Novii system or Zio XT Patch), on the torso (FitLinxx AmpStrip), on the thighs (LEO), on the head (Imec EEG Headset), or other parts of the body every time you wake up or before performing any physical activity.

Sports fans will be able to get insider knowledge of the games they are watching live. With sports leagues getting in on wearables, strapping/embedding athletes with devices while playing, and collaborating with tech companies to create a new experience, people at home can view comprehensive player stats throughout the game.

Smartwatches and bracelet-type trackers allow users to check e-mails, receive/make calls, view social media notifications and streamline other communications in just one device. However, like smartphones, it is how consumers utilize wearable features that could determine if a device will be an efficient addition to day to day life, or another "distraction".

Conclusion - The Future of Wearable Tech: Where to from Here?

Well we have reached the pinnacle of our beginners guide on Wearable Technology and I want to congratulate you for making it this far. In this final part we will be looking towards the future and what is in store for wearable technology

For over 15 years, software has reigned supreme in the tech industry. Since smartphones were embraced by everyone worldwide from mid-2000, hardware has definitely made a comeback and it isn't dying down anytime soon.

Today, we are seeing the rise of exciting devices like drones, connected homes, wearable tech, and other gadgets considered as part of The Internet of Things (IoT). These IoTs are physical objects that are designed with sensors, software, electronics, different types of technologies, or network connectivity, which enable the object to collect, record and exchange data.

The future of health wearable technology is as exciting as it is frightening. In the field of medicine, manufacturers are trying out devices that will be able to monitor moods, and neuro-centric wearables that use brain stimulation for managing pain at home. Implantables, wherein tiny devices are implanted into a user's body, can be a life-saving device, but consumers are still skeptical not only about the cost, but also about the invasiveness of the gadget.

In business, companies will continue to find applications of wearables that would increase employee collaborations and productivity. Advertisers would also find a way for ad placements within wearable apps.

More and more wearables will be created to cater to business operations (logistics, customer service), communications (social media, multimedia), security (emergency services, rescue tracking), health and wellness (obesity management, unobtrusive patient monitoring), sports (coaching, performance tracking), fashion (reactive response), gaming (HUD, VR, augmented reality), and other sectors.

2016 may seem like a peak for the wearable industry, but as announcements of upcoming products at the latest CES prove, wearable tech is here to stay.