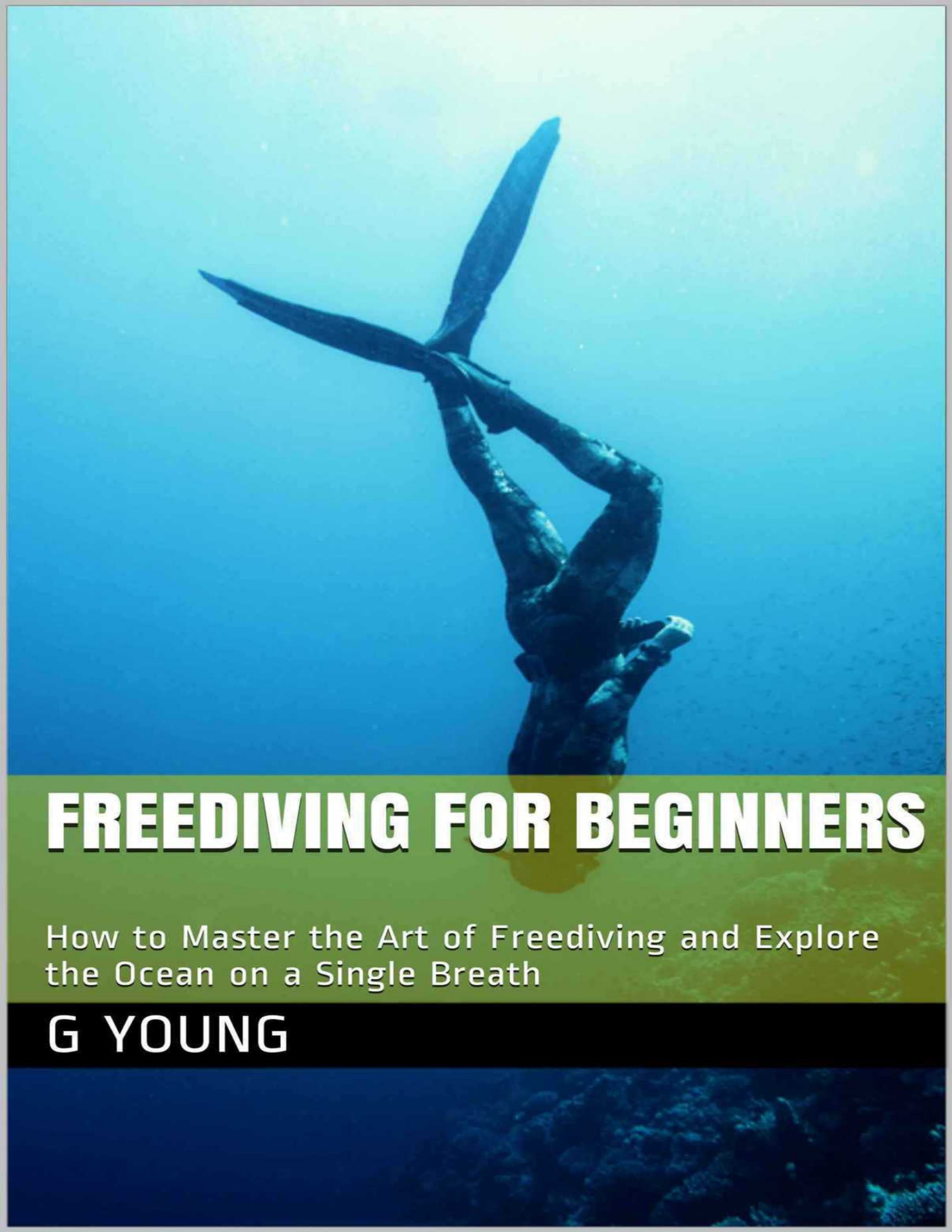

FREEDIVING FOR BEGINNERS

How to Master the Art of Freediving and Explore the Ocean on a Single Breath

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Freediving for Beginners

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By G Young

Table of Contents

Introduction

Chapter 1: What Is Freediving?

Chapter 2: Freediving Equipment Explained

Chapter 3: Basic Safety While Freediving

Chapter 4: Getting Ready for a Dive

Chapter 5: Dealing with Risks of Freediving

Chapter 6: How to Train as a Freediver

Chapter 7: Attending Freediving School

Chapter 8: Take Your Game to the Next Level

Conclusion

Introduction

I would like start by thanking you for purchasing this book “Freediving for Beginners: How to Master the Art of Freediving and Explore the Ocean on a Single Breath”!

This book is created to teach you the fundamentals of freediving and how you can become the best freediver you can possibly be!

This book takes a step-by-step approach in educating you about the basics of freediving. It all starts with defining freediving and showing you its beginnings. The next part will teach you how to get the right equipment and how you can dive safely. The next section will teach you how you can develop your diving skills and how you can physically and mentally prepare for a dive. Lastly, this book will show you the career opportunities you have if you choose a career in freediving and how you can be great at it.

Thank you once again and I hope you learn from this book!

Chapter 1: What Is Freediving?

It can be argued that freediving is the earliest form of underwater exploration. In fact, it has existed long before other forms of underwater exploration like scuba diving and submarines have existed. There used to be a time when freediving techniques are mainly used as a necessity, for acquiring food or resources located at the depths of the ocean. Nowadays, freediving is now also being used as a form of recreation and as a means for getting an in-depth knowledge of underwater life.

Freediving is defined as a type of underwater diving that involves the holding of breath. Other terms considered to be synonymous to it include skin diving and snorkeling. You hold your breath as you go underwater; your ability to hold it basically determines how far you can go before you will need to resurface and breathe. Strict freediving involves no use of any specialized swimming or diving equipment. However, the use of equipment such as masks, snorkels, wetsuits, and fins is considered passable and can even improve both performance and experience.

The history of freediving is long, tracing back to millions of years ago. Scientists believe that human ancestors live a semi-aquatic life,

meaning swimming and going underwater is something natural. This ability to go underwater is used both for gathering food and for evading land-based predators. This ability also partly explains why we have subcutaneous fat under our skin; to help us stay warm even when the waters are cold. It is also seen as the root of the “mammalian dive reflex”, a critical adaptation that helps us execute free dives and will be detailed at a later part of this book.

Freediving as a human skill was extensively used mainly for hunting food. Seafood is considered as a great food source because of its high protein, omega fatty acid, and mineral content. At the same time, diving is also popular for obtaining precious goods such as pearls and sponges. Only those skilled enough to dive underwater are capable of acquiring these materials, and they are often being paid handsomely for it (whether in the form of money or trade items).

At the turn of the 20th century, the discipline of freediving started to expand. This is partly facilitated by the creation of diving aids. Diving masks adequately covered both the eyes and nose, and was later developed in such a way that it can be used for equalizing pressure in the ears. Fins were also developed during this time, and it greatly helped in improving underwater motion. Wetsuits were also developed for protection to both predators and the elements, and even to enhance physical performance.

Freediving as we know it arguably started in the 1950s. Bob Croft, a US Navy instructor, trained military men operating submarines how to escape damaged submarines by holding their breath and swimming their way to the surface. Croft also developed the “lung packing” technique, which drives extra air into the lungs, enabling people to last longer underwater. Croft also became the first person to swim beyond 64 meters, the mark scientists then believed to be the physiological depth limit for freediving. Enzo Majorca became the first freediver to reach 100 meters in 1988.

Around this time, freediving has evolved into a sport. Competitive freediving has its roots in the record-setting exploits of the likes of Majorca and Jacques Mayol. Its popularity mainly exploded during the

1980s and 1990s, and continues to remain popular up to this day. Among the popular names to emerge in this sport include Tanya Streeter, Umberto Pelizzari, William Trubridge, Herbert Nitsch, and Natalia Molchanova. Their exploits promoted the popularity of freediving while at the same time challenging what the human body is capable of.

Nowadays, freediving has also become a very popular recreational activity. Many people try to learn this sport to get exercise, to learn more about bodies of water, and to explore their own physical and mental limits. It is simple to learn yet challenging to master. Each dive also Due to the high number of people wanting to learn this sport, freediving schools have emerged in different parts of the globe. Various authorities are also established to legitimize, promote, and regulate the sport. Whether it is done alone or with a team, freedriving provides a unique experience you can’t get anywhere else.

Chapter 2: Freediving Equipment Explained

One of the best things about freediving is the fact that you only need a minimal amount of equipment to get started. In fact, you can even go ahead without buying one! Of course, for practicality reasons and to aid you in your underwater exploits, it is highly recommended that you get the right gear. Some items in this list considered essentials and are highly beneficial in all levels of freediving. Others are designed for advanced divers, and are more useful for those with sophisticated levels of skill. Generally speaking, equipment for freediving are less sophisticated and expensive compared to scuba diving equipment. Here is a list of some of the equipment you must or at least consider to have if you are into freediving.

Mask

The mask is perhaps the most basic piece of equipment for freedivers. The mask provides a watertight seal for the eyes and the nose. While they are always adjustable, there are some mask designs that are best suited to the contours of your face. While mirrored and tinted lenses are available, clear lenses are best recommended as it makes it easy for your partner to see your eyes, either to interpret what you are saying or to check your condition. It is also recommended that there must be as little air volume in the mask as possible so your lungs won't have a hard time equalizing. Lastly, the skirt should be able to create a good seal in your face without being uncomfortable. It is best to test wear a mask before purchasing to ensure the right fit.

Snorkel

The snorkel allows you to breathe thru your mouth when you are swimming at the surface. This can make your life as a surface diver much easier. As a rule of thumb, snorkel design should be kept as simple as possible for ease of use and ideal underwater hydrodynamics. There are various things you should look for when searching for a snorkel. The mouthpiece should be comfortable

enough that you won't even notice that you're wearing it during the dive. You should also check if it correctly fits with your mask of choice. While the bore can be found in all kinds of shapes, it should not impede breathing in any way. Modifications such as purge valves and splash valves are welcome additions, as long as you know how to use them.

Fins

The fins are swimming aids that help you move more efficiently underwater. They are designed in such a way that it creates more propulsion from your legs. These devices are more effective underwater than they are on the surface. There are 2 types of fin designs available. The bi-fin, also called flippers, are paired fins that fit on each individual foot. This design is easier for beginners to use, and are considered to be adequate for recreational freediving and most purposes. The mono-fin is a one-piece device that fits both of your feet. They are more difficult to master, but once you do, it provides better performance for improved speed and depth. Fins can be constructed from different materials, ranging from rubber to carbon fiber.

Weights

This is considered as one part of your gear you can never live without. It is responsible for controlling your weight underwater; not only does it allow you to sink, but it also dictates the speed of both your descent and ascent. These weights, often available in the form of belts, are best worn in the hips so it won't restrict your breathing. It should also be secure yet flexible, as to maintain proper fit even as you progress in depth. Even spacing is also necessary to ensure ideal balance and hydrodynamics. Last but not least, it must have a quick release function, so that either you or your partner can easily detach it in the event of an emergency surface ascent.

Suit

The suit is mainly designed to provide protection against the elements. They are usually constructed using insulating material to protect the diver against extreme heat and cold. At the same time, the suit covers the skin and provides protection from superficial damage such as abrasions and stings. Some suits have designs that provide properties such as reflectivity and camouflage. An example of this would be reflective material printed into the suit. More advanced suits are constructed in a way that aids hydrodynamics. Some of them work by

reducing drag while swimming, while others work by providing compression on muscles. Suits can be found in different lengths and thickness, and can also be custom-made according to its user's body dimensions.

6. Gloves- Special mention must be given to gloves, even though it may seem like among the most ignored of all basic freediving equipment. Its main function is straightforward: it is mainly there to provide much-needed protection for our hands. It can provide insulation against temperature extremes, compression for optimal movement, and protection against injuring agents. Thick gloves tend to provide superior protection and insulation, while thinner gloves provide better hand movement. Ideally, your gloves should be at just the right thickness to adequately provide both of these properties. However, some situations call for a specific glove thickness. Gloves with articulation at the joint placements aid in hand movement.

Lanyard

The lanyard is considered as standard equipment in all levels of freediving competitions. It is also required for training dives. While it's not required for all forms of diving activities, we would highly recommend that you wear one at all times. The lanyard is mainly there to keep the diver attached to a line. The logic here is that in case of an emergency, the diver can pull up (or be pulled up by his/her companions) to the surface. Lines are also very helpful when diving in waters with low visibility. Lanyards are usually less than a meter long, and have a hook that attaches to the line. It is recommended that the lanyard must have a quick release mechanism in case of entanglement.

Line

The line can be secured at a stable location such as a boat, a platform, a buoy, or at any safe point at the surface. The length of the line usually varies. As a rule, it should be long enough to not restrict movement and range while short enough to minimize the risk of entanglement. Lines should also be constructed using a durable material, and this material should be weaved sturdily. The usual thickness of diving lines ranges from 8 to 15mm, which provides superior durability for most purposes. Markings should also be present for accurate measurement of either depth or distance. Ideally, the line should be visible both at the surface and underwater, so it's commonly colored white or any bright color.

Buoy

The buoy is almost always complementary to a line. The main function of a buoy is to serve as an attachment to your line. Its secondary functions include serving as a warning device that a diver is underneath it, a repository for water, first aid, and other supplies, and as a temporary place where the diver can rest while on the surface. A buoy should be buoyant enough to stay afloat even when supporting the weight of the line and of at least 1 diver. Buoys usually indicate how much weight they can carry, so use that as a reference while shopping. The buoy should also ideally have a storage canister for

goods like water. Last but not least, it should be colored white or any bright color so it can be easily spotted.

Dive computer

The dive computer used to be reserved only for professionals and hardcore divers. Nowadays, there are now computers designed to be useful even for recreational divers. The computer is capable of processing and displaying different kinds of information, which the diver can then use for multiple purposes. Computers can display in real time measurements and statistics such as current depth, maximum depth, surface interval time, water temperature, date and time, and dive time. Some computers save your progress, which you can then access to evaluate your last dive session. The computer can even serve as a safety device, alerting you of dangers such as reaching excessive depth and excessive staying underwater.

Those are just some of the equipment you will need to have for your freediving kit. Some of them you need more than others, but each of them plays a vital role for optimal performance and safety. Shopping for these items can be tough for beginners, as they don't really know what to expect. However, your shopping skills become better as you become more familiar with your own needs as a diver. Here are some tips I can share to you when you are shopping for freediving gear.

Prioritize the essentials

While you may be swayed by all the fancy equipment in the stores, in diving publications, and worn by your peers, it is important that you prioritize first the essentials. It is important that you put on top of your list the most important tools you will need for your dive. For example, you would want to prioritize getting a nice pair of goggles, a wetsuit appropriate for the waters you swim in, and a safety line. The advanced equipment can wait as your diving skills progress. For now, it's most appropriate to start with the basics.

Test if possible

Whenever possible, it is most ideal that you test the items before purchasing them. While not all stores would allow you to do a test dive using their products, you can at least wear them and check out its various details and functions. If you feel comfortable using it and it covers all the traits you want for a particular item, then it's most likely going to give your money's worth. One tip I can share to aid your search is to use a particular item on a rental. It will give you a somewhat accurate idea of how that piece of gear will run during a dive.

Keep spares

For some of your items, it is vital that you bring at least one spare during a dive. While it will be a sizable investment for you, we would recommend that you keep spares of some of your stuff. It is imperative that you bring at least one spare goggles and snorkel with you on each dive. This is because these items, as vital as they are, may fail during a dive, so it's essential that you have a backup. Keeping extra suits and fins for various weather conditions, water conditions, and diving depths can also come handy if you've become a frequent diver.

Look out for product-specific properties

- It would also be nice to check out the features of the items you shop for. Some of these functions may be merely aesthetic, but most of them have actual performance and safety benefits. Take for example in goggles. While goggles with plastic lenses will do just fine in most conditions, lenses made of tempered glass deliver better clarity and is more resistant to fogging. Another example would be your dive computer. The more features it has, the better it is for you, as long as you know what the purpose of each function is.
5. Read product reviews- Of course, you cannot test all the products in the market. That is simply not possible. The best alternative you have for evaluating the numerous freediving products on the market today is to read product reviews. Written by other freedivers, with some of them being professionals, it gives you an idea of a product's features, advantages, and disadvantages. They can also tell you if this item is worth purchasing and for which divers or situations they are most ideal to use.

Shopping for freediving gear should not be complicated. As long as you know the things you need during a dive, you should not lose your way.

Chapter 3: Basic Safety While Freediving

Whether done recreationally or professionally, freediving naturally has its own risks. Think of it this way; there will always be risks (meaning you will be putting your life on the line) each time you go for a dive. While the risks will always be there, there are multiple ways for you to enjoy freediving without putting your life (and others' lives too) in unnecessary danger. Learning basic safety while freediving can help you and your buddies get out of each dive in one piece. Here are some of the basics of safety you must learn and keep in mind.

Plan a dive properly

Creating a dive plan is essential to help the dive team accomplish their goals and to maintain the safety of each member. It is important that the roles of each member of the dive team are made clear. The time limit for doing the dive is also established at this time to ensure the safety of all. Both weather and water conditions are also evaluated to determine if it's safe for the dive to proceed. Sorting out gears such as setting the right weight and establishing safety lines are also done before the dive.

Never freedive alone

No matter what your level of skill in diving is, it is advised that you never freedive alone. Even if you are the best freediver in the world, anything can happen when you are out there in the open waters. Not only should you have a partner in standby when you dive, you should have a capable partner. A suitable partner should be able to monitor your progress, rescue you if they sense you are in trouble, and should be capable of performing basic safety techniques such as first aid and CPR.

Become a good diving partner

If you are a freediver, one way or another you're going to be a partner to another diver. For everyone's safety, it is important that you train yourself to become the best dive partner you can be. You got to have a firm awareness of safe diving and how to make use of safety equipment. You also got to know how to assess if any member of your dive team is in distress and when you should attempt a rescue. You should also have knowledge of first aid, CPR, and other safety techniques. Last but not least, you should know when to call for help (ex.: 911, Coast Guard, etc.)

Weigh yourself properly

Weighting is one essential skill you must learn. If you do this wrong, it can get you into trouble really quick. You'll need to put weight to help your descent, but you should be wary about placing too much weight.

Overweighting can cause equalization problems during descent and can make ascent difficult. As a rule, when diving at 15 meters, you should only place weight that's enough to maintain normal buoyancy. Also, know when to unload your weights during an emergency.

Never exhale underwater

You should only do exhalations on the surface for safety reasons. Exhaling during descent can make you prone to equalization problems, which can adversely affect your oxygen reserves. Exhaling during ascent can cause your lungs to empty, which causes loss of buoyancy. This will make ascent more difficult, which can have serious consequences. Related to this, diaphragmatic movement while underwater can cause similar effects.

Remove snorkel from mouth after ascent

The snorkel is your friend during surface swimming and shallow diving. However, there are specific circumstances where inappropriate use of the snorkel can do more harm than good. Blowing your snorkel immediately after you surface may look cool on photos, but it is in fact dangerous. This can actually cause SWB, especially when the diver has just about reached his/her limit. Also, staying attached to your snorkel while descending to deep waters can make equalization difficult and even make you more prone to swallowing water.

Do not excessively move neck during descent or ascent

Neck extension is a no-no for both ascent and descent. On ascent, extending your neck affects blood flow to the brain, which can cause you to lose unconsciousness. Also, this position will put pressure on your neck's baroreceptors, which can alter your cardiovascular functions and also lead to loss of consciousness. On descent, extending your neck causes difficulty in equalization, which adversely affects your blood circulation and respiratory function. Lastly, assuming a neck extended position adversely affects hydrodynamics.

Never ascend too quickly

One of the most dangerous things you can do as a diver is to ascend too quickly. Some do it because of over-eagerness to resurface or because of panic. This can potentially cause decompression sickness, one of the most dreaded health problems associated with any form of deep-sea diving. At the same time, rushing your ascent consumes too much oxygen while driving your heart rate up. This can speed up fatigue, which can have its own adverse effects.

Establish all safety markers

Safety markers are essential in any kind of dive. Using a dive line not only provides a guideline for the diver when going back up to the surface, but it also helps keep them visible to other divers and rescue teams. It is advised that the line should be bright-colored for easy visibility. The line can be held into place by either the boat or the buoy. When a buoy is used, it should also be bright-colored so it can easily be seen by those on the surface. For better safety, there should be a “diver down” flag mounted at the buoy while a dive is underway.

Preserve correct time intervals

Maintaining correct dive intervals is essential to give the body time to normalize before going for another dive. This is mainly to return your blood oxygen and carbon dioxide levels back to normal. These intervals are also there to prevent excessive buildup of lactic acid, which can cause pain and muscle dysfunction. As a rule of thumb, breaks in between deep dives should be at least from 5 to 8 minutes. Related to this, it is advised that you only do 1 to 2 deep dives per session to prevent excessive stress on your body.

Never overwork yourself

It is not uncommon for some divers to be too eager when they go for dives. Because of reasons ranging from too much eagerness to a desire to push one’s limits, the tendency is for divers to work themselves to the edge of their physical capabilities in each session. However, once you go beyond your limit, you become more prone to the devastating adverse effects of diving. Your judgment becomes clouded, your body starts to get weak, and you fall prey to problems such as lactic acid

buildup, asphyxia, and decompression sickness.

Beware of empty lung dives

An empty lung dive is one of the hardest skills to master in diving. In fact, when done wrong, it can easily put any diver's life in danger. A diver descends with low oxygen, making their bodies negatively buoyant while also being more prone to a blackout. Also, while on a blackout, the diver can have a larnyngospasm, which will let water into their lungs, speeding up the drowning process. Drowning in deep waters can have serious consequences, the worst of it being death and irreversible neurologic damage. When doing an empty lung dive, it is important that you are accompanied by a partner with full lungs and with extensive experience in handling empty dives. Also, you should not use weight belts.

Never dive when not feeling well

It is important that you only dive when you are at full strength. Freediving is already physically and mentally demanding as it is, so giving yourself a handicap out there by diving at less than your full capacity could spell trouble. If you are feeling tired, cold, or sleep deprived, you should not do a dive as these conditions weaken your body, impair mental judgment, and leaves you more prone to SWB. At the same time, never dive under the influence of alcohol or illicit drugs. Consult your physician first before diving if you are currently taking any prescription medications to ensure safety.

Never dive immediately after a dive

It is important that you leave safe intervals between dive sessions to allow your body to adequately recover. It is not advisable to do a freedive immediately after another freedive session, or worse a scuba dive. This is because there are leftover nitrogen in your tissues which can lead to decompression sickness. At the same time, your body has not yet fully recovered from the dive, which can leave you more prone to the effects of fatigue. As a rule of thumb, you should have at least 12 hours of rest before you go for another dive.

Be physically and mentally prepared

It has been mentioned here over and over again; freediving is a highly demanding discipline. Being less than your best here puts you at risk to all of freediving's dangers, making you more prone to serious injuries. It is important that you are physically and mentally prepared before going for a dive. It is not a good idea if you go on a dive when you are physically drained or mentally stressed out. Make sure that you are relaxed, well-rested, and focused before embarking on a diving session. More importantly, you should recognize your own limits and learn when to back off. If you are showing signs of fatigue or injury (ex.: ear pain, shortness of breath, cyanosis, impaired focus), then it's time to call it a day or beg off from a dive.

When diving, it is important that you keep a "safety first" approach. It is always better to be safe than sorry. Practicing basic safety techniques while diving will help keep you and your dive mates are safe at all times. As a parting note, always consider that your life (and your partners' lives) is more important than accomplishing any dive goal. Also, learn when to ask for help. A timely call for backup can save lives whenever the worst case scenario happens.

Chapter 4: Getting Ready for a Dive

Given the immense demands freediving imposes in both body and mind, it is important that you get yourself ready. There is proper preparation technique for freediving that will help you be at your best once you go into the depths. Here are some of the things you should do to make sure that you are ready for the dive. These techniques will help you push further, last longer, and reduce your risk of injuries.

Stretching

Flexibility is one of the most important physical traits you must have as a freediver. The benefits of flexibility for a diver are numerous. It helps you get better movement underwater, improves equalization, and avoids premature muscle cramping. It also aids in circulation, which is crucial for improving muscle strength, endurance, and avoidance of lactic acid buildup. Most divers have their own stretching routine; in fact, the professionals can't and don't dive without doing their personal routine. Making this a habit will help you as you progress as a freediver.

The human body is naturally flexible. However, there is a tendency for this flexibility to be reduced as a person advances in age. Part of it is because of the natural aging process, but the biggest reason for flexibility loss is neglect on the part of the diver. Some would say that the addition of muscle mass inhibits flexibility, but that is definitely not true. I have seen athletes from multiple disciplines with superior flexibility even while maintaining a muscular physique. Just take a look at professional gymnasts. The point is that no matter what your body type is, you can always develop and maintain your flexibility.

Before you begin stretching, it is important that you are comfortable doing it. For example, doing your stretches just minutes before you go on a dive, in a place where it would be uncomfortable for you to do your routine, would virtually shortchange your routine. Do it in a place where you are comfortable and where you can have enough space to perform your routine. If that is not possible, you can always modify your routine as needed. Stretching exercises are best done when your

body is adequately warmed up and on an empty stomach.

Specific body regions need more flexibility than others when you are about to do a freedive. Keeping your rib cage flexible is essential to help your body adjust adequately to depth changes during descent. Keeping your shoulders flexible is important for proper arm movements, which is important for just about every position in freediving. Diaphragm stretching exercises are crucial because adequate diaphragm flexibility makes it easy for the lungs to compress and extend. Hip and leg stretching reduces incidences of cramps while also adding power to your strokes. There are specific stretching routines designed for each body region. A quick search would yield multiple routines that will fit your age, body type, and level of fitness.

Mixing and matching different stretching exercises will help you build a routine that you can follow. At the same time, you can perform pre-set exercise routines such as yoga to get your body ready for the dive ahead. Again, the ideal stretching routine is basically up to you. You got to fit your routine with the situation and your level of fitness. Most importantly, you should create a stretching routine that you can (and will) follow.

Equalization

Most people only know about the term equalization once they actually start diving. Equalization is the technique of making the pressure inside your air spaces such as ears and sinuses equal to the pressure underwater. This is very important as without proper equalization, you become more prone to injury. At the same time, non-equalization can be very painful, especially as you go deeper. The good thing is that equalization is a skill that can be learned by anyone. With experience, you can equalize without much effort, allowing you to go deeper without pain and fear of injury.

So what is the importance of equalization anyway? This is a set of technique used for adding air into the body's air spaces to compensate for the increased pressure during descent to deep waters. Air spaces that need to be equalized include the ears, the sinuses, and the mask.

Not equalizing these spaces can make descent uncomfortable. Worse, it can even cause serious injuries. As such, no matter what your level of diving skill is, it is important that you learn how to equalize.

So what are the consequences of failure of equalization? The first symptom that you will feel would be pain. This pain can become progressively worse as you descend deeper. Without equalization, your body will give out to the pressure, with your cavities bursting. Your inner ear can burst, which can cause hearing loss. Your sinuses can also burst, which can cause bleeding, with most of the blood coming out of your nose. Given the seriousness of such injuries, it becomes all the more important that you learn equalization techniques.

With the exception of when your sinuses are blocked or congested, they usually equalize together with your ears. However, should your sinuses get blocked or congested by any reason (ex.: during colds), there are remedies you can use to aid in decongestion. Steam inhalation is very effective for softening and shifting mucus stuck in your airways. Using essential oils or vapor inhalers can also help in decongesting. However, if the congestion is not relieved by these techniques, it's best to postpone your dive until you fully recover. The risks of non-equalization are too big for you to risk it.

Equalizing your ears is a must to protect the delicate structures inside your ear. These techniques mainly equalize the middle ear, the area behind the eardrum that leads to the back of the throat via the Eustachian tube. One technique that's universally considered to be effective for freediving purposes is the Frenzel maneuver. This uses the back of your tongue to create pressure at the back of your throat and equalize pressure. This is considered ideal for diving purposes as it does not use the diaphragm, meaning you can use this technique at just about every depth.

During a freedive, equalizing your mask is also a must. Wearing a mask creates air space, which can also be affected by pressure changes during ascent and descent. Just like in the sinuses and ears, inappropriate pressure changes in the mask can cause bodily harm. Equalizing your mask is as simple as exhaling a minimal amount of air

into the nasal air space. It must be noted that you should train yourself to not use too much air for mask equalization, as unnecessary air loss has its consequences. The reverse effect is then expected as you ascend back to the surface. To compensate, you can sniff in the air inside your mask as it expands during ascent.

Relaxation

Being relaxed is a must if you are a freediver. It may be difficult considering all the risks involved and all the maneuvers and decisions you must make before, during, and after the dive. However, relaxing yourself is very important for numerous reasons. It keeps your mind clear for making those critical decisions while underwater. It also helps in keeping your oxygen use efficient, which is crucial as the amount of oxygen you carry in your body during a dive is minimal. It also helps in controlling your heart rate.

The benefits of staying relaxed during a dive are pretty straightforward. So how are you going to do it? The first technique you can use is not really even a technique. Simply enjoying the dive helps you stay relaxed in both mind and body. Instead of worrying of what can go wrong or if you're doing things correctly, focus on the moment itself. Focus on the beauty of the underwater world, as well as the unique feeling of weightlessness, during your dive. That will greatly help you relax and do your thing underwater.

Another technique that can help you relax during a dive is thru breathing techniques. Proper breathing affects all parts of your body; improper breathing compromises almost all of your body systems while proper breathing makes them perform better. As a rule of thumb, efficient breathing should reach all the way to the abdomen. This allows you to take in as much air as possible while creating a relaxing effect. Practicing abdominal breathing helps you accomplish this. It will help you absorb more oxygen and expel more waste products with each breath.

Mastery of diving skills also helps you relax. With practice and experience, you become more confident of your abilities underwater.

Getting more dives under your belt helps you develop that level of confidence that can only come with familiarity. Also, working hard on developing your skills during training will manifest itself once you're out there diving. Work ethic does wonders to a person's confidence and aids in relaxation, and freediving is no exception to this rule.

Adequate preparation will help you get the most out of every dive. Aside from bringing out your maximum performance potential, it also helps in improving safety. As early as possible, you should make an effort in integrating preparation techniques to your pre-dive routine. Trust us, these seemingly small things will make a huge difference to your diving experience.

Chapter 5: Dealing with Risks of Freediving

It goes without saying that freediving is one of the most demanding sports out there. It will test you physically and mentally, often pushing the limits of what the human body can accomplish. Given this, there are inherent dangers to freediving. Understanding them not only increases your awareness of what you're getting into, but it also helps you learn how you can possibly avoid them from happening to you or to another diver. Here are some of the risks of freediving and how you can deal with them the right way.

There are multiple risks associated with freediving. Some of them are related to your body's own physical limitations. Others are linked to your habits when you're not diving. Other risks are mainly tied to external factors such as the environment. All of these factors play different roles on determining how safe you really are with each dive. The following is a list of factors that puts you at risk in each freediving session.

Hydration levels

The human body is made up of 60-70% water. Think of that for a second. While you may have heard it before, maintaining optimal hydration levels is a must, especially when you are tens or even hundreds of feet underwater. You can lose water during a dive thru various mechanisms such as breathing, urination, and perspiration. The effects of dehydration can be severe, resulting to a drop in physical performance and a higher risk for diving injury or illness. As such, it is a must that you keep your body properly hydrated before starting a dive. Drinking water before and after a dive is a must. It is also important to maintain appropriate electrolyte levels.

Nutrition

Nutrition is also an important factor to consider when engaged in physically demanding activities such as freediving. Of course, your main source of nutrition would be food. Maintaining a balanced diet will ensure that your body is properly nourished at all times. Multivitamins and health supplements can also help in maintaining proper nutrition. You also got to consider what type of food you consume before a dive. Eat foods that contain complex carbohydrates, proteins, and fats before a dive for sustained energy. Also, before a dive, you should avoid foods that increase heart rate as it causes you to lose oxygen faster.

Substance Use

Using alcohol, tobacco, and illicit substances can have multiple negative effects on your body. Not only will the use of these substances take away from your performance, but it will also put you at a higher risk of health hazards while diving. Cigarette smoking produces carbon monoxide which binds to hemoglobin, making your blood carry oxygen less efficiently. Alcohol intoxication impairs both motor and cognitive skill. The use of illicit substances can have varying adverse effects on human physiology, which can put you at risk to life-threatening conditions while underwater. While it is best advised to stop using these products, you should at least not consume any of

them at least 24 hours before a diving session.

Physical Fitness

Your level of physical fitness has a huge say on how good your dive will be and how prone you are to the risks posed by freediving. If you are the type who maintains a good fitness regimen, chances are you'll be able to swim faster and last longer. Stress is known to have an opposite effect here. If you're stressed out, your performance becomes adversely affected. Being too tired or stressed out has a more powerful deleterious effect compared to the enhancing effect of good physical fitness. It should also be mentioned that too much exercise also has a negative effect on both performance and endurance.

5. Medications- Certain medications may have a positive or negative effect on your diving performance. If you are under any kind of medication, it is imperative that you consult your doctor first before trying freediving. Special mention must be made regarding anti-hypertensive drugs. It has been reported that people on anti-hypertensives experienced excessively lowered blood pressure, even at shallow depths. This could lead to unconsciousness, which could have potentially disastrous consequences if it happens underwater.

Temperature

Just like in land, you should watch out for temperature extremes in the water. It is not uncommon to see free divers doing their thing with minimal clothing. This leaves them at the mercy of temperature extremes while diving. Diving in extremely cold weather can lead to hypothermia, which can be potentially fatal. In contrast, diving in extremely warm weather can lead to sunburn, heat exhaustion, or heat stroke. It is advised that you avoid diving on such temperature extremes. At the very least, wear protective equipment such as wetsuits. Also, take extra care when diving at such environments.

Weather

The weather is another major consideration when doing any kind of dive. If you are not careful, getting caught in an adverse weather scenario can have fatal consequences. It is imperative that before

going on a dive, you should at least check the weather forecast. It is never a smart idea to do a free dive when a storm or any kind of significant weather disturbance is imminent. You should also stay vigilant at all times. Always remember that forecasts do not predict everything, and the weather can change dramatically almost instantly. If you sense bad weather in the middle of a dive, get out of the water. It's better to be safe than sorry.

Tides and currents

Dealing with tides and currents is essential for safety reasons. Not noting these things can get you into trouble real quick. Some high or low tides can alter the sea level dramatically, and this can have a dramatic effect on the surrounding topography, especially if you are diving close to the shore. Meanwhile, swimming against strong currents is a problematic situation even for professionals. You wouldn't want to mess against tides and currents. Having knowledge of these 2 phenomena can be potentially life-saving, especially when swimming in unfamiliar territory.

Flora and fauna

There are many ways for you to get harmed when freediving. One of the most common culprits are the local flora and fauna living in that specific body of water. Corals and jellyfishes can pack a really nasty sting, and can even cause potentially fatal poisoning if left unchecked. You should also watch out for plants or animals that can bring the pain. And of course, who could forget the big bad predators such as sharks? It is always best to swim in the side of caution when swimming in the habitat of these creatures.

10. Pressure- Pressure is the culprit for some of the most devastating injuries associated with diving. Your body has numerous air spaces, and pressure changes during diving can cause some nasty injuries. Barotrauma is a group of injuries caused by pressure changes during either descent or ascent. Common body parts injured by barotrauma include the ears, eyes, sinuses, and lungs. Another dreaded diving-related problem related to pressure is decompression sickness. Caused by the presence of excessive amounts of nitrogen in the blood, it can

cause varying degrees of blood vessel damage.

Those are just some of the risks associated with every dive. Depending on the circumstance, these factors can make a dive too dangerous and even put your life at risk. However, there are different ways to minimize your risk of being a victim for one reason or another. Mastering the fundamentals of freediving as well as performing all the necessary safety precautions will help you and your diving buddies manage the risks of freediving and avoid all untoward incidents from happening.

Chapter 6: How to Train as a Freediver

Being a freediver does not begin and end at your diving sessions. What you do in between dives actually separates a great diver from a good one. It takes a lot of hard work to reach your full potential. Being a great diver takes discipline and a full commitment to maximizing one's talents. Are you wondering how you can train as a freediver? This chapter serves as a crash course on training to become the best diver you can be.

Physical Training

Conditioning is such an important aspect of being a freediver. Exercise is important for preparing divers of all levels to the physical and mental rigors of freediving. In fact, training begins even long before you take your first dip at the swimming pool of your diving school. You may ask yourself this question: are all these necessary? The answer is a resounding yes. In fact, even the best divers in the world do most of their training out of the water, doing most of their training at the gym, at the trails, or even at home.

General exercises can help improve various aspects of your physical performance: strength, flexibility, and endurance. At the same time, it also helps your cardiovascular performance, increasing the efficiency of your circulation while reducing heart rate. As mentioned in one of the previous chapters, stretching improves not only flexibility and range of motion, but also strength and coordination. Strength training helps in developing explosiveness, strength, and endurance. It is recommended that you train muscles frequently used during diving, such as your shoulders, arms, and legs. Cardio training such as running and swimming helps develop endurance and adapt your muscles to performing even at distressing circumstances.

Dry training is an exercise technique that involves breath holding. It goes without saying that developing your ability to hold your breath is crucial for achieving success in freediving. Before attempting any dry training exercise, make sure to take note of the procedure involved and perform all necessary safety precautions. It is ideal that you do dry

training while lying down on a bed, because breath holding while standing or walking is risky. You can also use a heart rate monitor while dry training to check your heart rate. For safety reasons, any breath holding exercise should be done with a partner.

Training tables are designed to help you exercise in conditions where there are high levels of carbon dioxide and low levels of oxygen. When using a carbon dioxide table, your breath hold lengths stay the same while your rest periods decrease in length. Conversely, when using an oxygen table, your breath hold lengths increase while your rest periods stay the same. As a rule of thumb, the carbon dioxide table should be set at 60% of your maximum breath hold time, while the oxygen table should be set at 85% of your maximum breath hold time. For safety reasons, it is recommended that you don't do more than one table a day and maximum breath hold attempts should be kept at just one per day.

Pool training is an essential component of freediving training. Just about every diving school and training facility has it. These pools provide a venue for beginners to develop their diving skills before hitting the open waters. At the same time, they also provide a venue for advanced divers to further refine their technique and improve their body's durability. Basic pool training exercises include swimming, shallow diving, and breath holding. Advanced pool training exercises include static apnea, dynamic apnea, and maximum depth training. The same diving safety rules apply for pool training; never go beyond what your body can do, always train with a qualified partner, and allow recovery periods.

Diet

Taking care of your body is essential for achieving success in freediving. Of course, you can do all the fitness techniques out there. However, it would be tough to reach your full fitness potential with the help of a nutritious diet. As fitness experts around the world will tell you, diet is more important than exercise when it comes to building a fit body. Beyond staying fit, your diet also has an impact on your freediving performance. The type of diet you use also affects your

ability to hold your breath, your ability to equalize, and your recovery speed after dives and training sessions.

There are certain foods that you should avoid when freediving. At the top of the list would be foods that cause inflammation. Pro-inflammatory processes causes increased mucus production, which can interfere with your ability to equalize. At the same time, these inflammatory substances can cause your chest to tighten, restricting your breathing. Last but not least, inflammation can cause a wide range of respiratory problems such as colds, asthma, and COPD. Examples of foods that cause pro-inflammatory effects include dairy products, gluten, refined carbohydrates, refined food products, and any kind of processed food. Also, you should take note of your allergies towards specific food and drugs.

You should also avoid foods that causes your heart rate to rise, especially when you are about to do a dive. Sugar is one common ingredient that causes your heart rate to spike. Caffeine is another ingredient that causes an increase in your heart rate. You should also avoid foods that contain ingredients that cause a diuretic and/or dehydrating effect. Examples of such food include caffeine-containing food and alcohol. As such, it is not recommended for you to consume drinks such as coffee, energy drinks, and alcoholic beverages at least 12 hours before a dive.

Another class of food you should avoid consuming before you embark on a dive is the so-called FODMAP foods. FODMAP stands for fermentable oligosaccharides, disaccharides, monosaccharides, and polyols. These are foods that contain short-chain carbohydrates that are incompletely absorbed in the gastrointestinal tract. The unabsorbed sugars are then fermented by bacteria living in your gastrointestinal tract. This fermentation would lead to the production of gas, leading to bloating. In addition, these sugars also exert an osmotic effect, pushing water out into the gut, leading to watery stools and diarrhea. In summary, FODMAP foods exert effects that resemble irritable bowel syndrome (IBS). Foods classified as FODMAP include high fructose corn syrup, honey, dairy, wheat, legumes, sweeteners, and stone fruits.

Beyond dodging all the bad stuff, preparing a diet for diving purposes is all about ensuring that your body gets all the good stuff. Many are unable to reach their body's full potential because they lack attention to detail for nutrition. Eating a balanced diet containing just the right amount of macronutrients and micronutrients is essential for maintaining health. Aside from this, avoiding the consumption of excess calories, especially empty ones, will help you maintain ideal body mass and function.

Chapter 7: Attending Freediving School

You might be wondering if enrolling in a school or training facility will be worth your time and money. After all, the temptation of trying to learn everything by yourself is almost always very strong. Everyone loves independence, and everyone wants to do it their own way if that's possible. While freediving can be self-learned, getting professional help to learn this skill will prove to be advantageous in so many ways. This chapter will talk about the advantages of enrolling in a freediving school and how you can find the right facility for developing your skills.

Here are some of the reasons why it is highly encouraged that you attend freediving school before you proceed to dive yourself. These skills will prove invaluable for you and your diving partners, regardless of what level of freediving you intend to learn.

It will help you learn the basics in preparing yourself

Chapter 6 discussed in detail how you should prepare for a dive. Some of the steps are self-explanatory, while others might require a little more in-depth explanation. This is where a freediving school comes into the picture. They will start training you long before you even make your first dive. One of the first (and most important) things they will teach you is how you should prepare for a dive. Learning how to use your equipment, physically and mentally preparing for a dive, and judging risks properly will significantly increase your odds of successfully completing dives without any untoward incident.

It will help you master the right diving technique

Unlike other skills and disciplines, the learn-as-you-go approach in learning is not a very good idea in freediving. One mistake in this sport, and you can put yourself and even others at harm's way. Mastering the proper diving technique will ensure that you do it right. From controlling your breathing to avoiding the deadly effects of pressure changes, a freediving school will teach you everything you need to know to ensure your dive is a success, even long before you make your first dive.

It is a low-risk way to learn freediving

Learning how to dive is certainly not easy. Given the complications of making errors, it would be nice to learn this skill first in a controlled environment. This is where freediving schools come into the picture. You will be guided by professionals as you try to master the fundamentals of freediving. Also, you will be doing these practice dives at a training facility (usually a pool or a stretch of open water that's not too dangerous), often with the supervision of professionals, where your progress can be easily monitored. While you can still get hurt at diving school, it is much less risky than going for a freedive right away without any practice.

It will teach you the science of freediving

The science of freediving was explained in Chapter 5. However, it is a completely different matter if someone is out there to teach you what

those things really mean. Freediving is a complex skill to learn, and not everything is taught on this book. Attending diving school will help you acquire an in-depth knowledge of the different scientific principles used in freediving. Beyond learning them, these courses will also teach you how you can apply this knowledge in each freediving session you participate in.

Now that you know why attending freediving school is important, the next question to ask is how you can find the right school for your needs. Here are some tips I can share to guide your search.

Check the type of course they offer

Freediving centers offer different courses for a wide range of clients. Some offer courses mainly designed for beginners, while others are designed for those who have intermediate or advanced skills. Some centers even offer courses that will allow you to acquire a professional license and become authorized to teach freediving lessons. Make sure to check out each school to see which courses they offer and specialize in.

Make sure the facility and instructors are certified

It is important that the training facility you apply on are certified by the proper authorities. Now only would this ensure that you will receive the highest standard of training, but this would also ensure that your transaction shall be 100% secure. At the same time, make sure to check if your trainer/s are certified to train other freedivers. Teaching freediving requires a different license, so it's a must to check it out as well. Organizations that regulate diver training and other freediving matters include AIDA (Association Internationale D'Apnee), PADI (Professional Association of Diving Instructors), CMAS (World Underwater Federation), and FII (Freediving Instructors International).

Check out reviews

Another way to ensure that you find the best training facility near you is to check out reviews. Most of these reviews are written on dedicated websites or in diving publications, with most of them peer-reviewed and written by professionals who are freedivers as well. These reviews cover a wide range of topics, ranging from the description of the facility to the approach of the diving instructors. You can learn most of the things you need to know about a certain freediving schools with these reviews.

Directly inquire with the school

Most of the time, reading promotional materials and reviews does not paint the full picture. Sometimes, you got to do some of the investigating yourself. The first step in doing this is to contact them. You can send them an email, call them on the phone, or send a message via their website if they have one. More often than not, they will promptly respond to all of your inquiries. Collect as much information as you can. It is also better if you can visit their facility before signing up. If you like what you see, sign up for a class!

Whether you just want the experience or you have plans to be a professional, attending freediving school is beneficial in more ways than one. Now that you know how to find schools that best fit your needs, it is time to start developing your skills as a freediver!

Chapter 8: Take Your Game to the Next Level

There will come a time when you will graduate from the beginner level of freediving. From there, it would be up to you if you are willing to take the next step up the ladder. Some may look at freediving as a hobby, but you can actually use this skill to earn yourself as a career. It can help you earn money, explore the world, meet new people, and make a difference. If you are willing to do what it takes to take your game to the next level, you will most likely accomplish it. Here are some career options you have if you choose to start a career as a freediver.

Competitive freediving

Competitive freediving is a legitimate sport that has a worldwide following. People engaged in this sport are true professionals; they are true warriors who are willing to do whatever it takes to get the most out of their abilities. Just like any professional athlete, a competitive freediver invests a lot of their time training, refining both their physique and their technique for optimal performance. It is considered as a niche sport, where competitions are relatively fierce and earning opportunities are not as bountiful as other sports.

Freediving education

Another common route taken by freedivers is becoming an instructor. You can turn teaching freediving as your career of your choice. If you are passionate about both freediving and teaching, chances are you will succeed in this field. Teaching freediving is a relatively lucrative business, and you don't have to be a champion diver to teach this sport. The benefits of taking on this profession are numerous; it helps in perfecting your skill, it helps build your character, and it feels good to see your students learn the sport you love because of your help.

Regardless of what route you take, there are some things you need to possess to become successful. If you aim to become a professional freediver, here are some of the things you have to develop.

Diving skills

It is imperative that you work on your diving skills if you intend to make a living out of it. As a competitive diver, you're going to face other divers who might be more talented and more hardworking than you are. Given the tight competition, it is imperative that you step your game up. You got to constantly work on your diving skills, investing as many hours as possible in improving your craft. Most of the time, you will have to spend for your training and competitions. However, that is part of the life of a professional freediver.

People skills

As a professional, you got to develop a wide range of people skills. It is not enough that you are good at diving to succeed in this gig; you got to work on the way you interact with others to get the best out of your career. You got to show respect to your team, other divers, and your clients. You got to carry yourself with both grace and professionalism at all times. How you interact with others can determine how far you will go as a professional freediver, so it pays to have a good attitude.

Humility

It is important that you always keep your feet on the ground as a professional freediver. You have to remember that the world of freediving is relatively small; you can easily earn a bad rap and that can haunt you for the rest of your career. It is important that you treat your students with empathy, compassion, and respect. It is also important that you treat your peers, whether they are superior or inferior to you, with equal respect. Lastly, even if you know everything, be humble to know that you don't know everything and you can always learn something new.

Love for the sport

This is perhaps the biggest trait you must have if you are intending to make a career out of freediving. You got to genuinely love what you are doing. It won't be enough that you hold on to this gig just because you're good at it or it helps you earn good money. A lack of passion will eventually burn you out. On the flipside, if you are passionate about what you are doing, putting in the work becomes much easier. You will keep going, no matter how tough some days may become. If you love what you are doing, it will show in the results.

Conclusion

Thank you for purchasing this book! I hope this book has taught you everything you need to know about freediving! The next step is to use the tips mentioned in this book to become the best freediver you can possibly be!

If you like this book, recommend this to your friends. Also, please give it a 5-star review! It will be highly appreciated!