

## Chapter 1 : Cycling - Wikipedia

*The best mountain bike can be a lot of things, depending on your personal riding style, tastes, budget, and local trails. Like other segments of cycling, the mountain bike pie continues to be.*

This robust and easy to read monitor is great for every rider. What Is a Bike Computer? A bicycle computer, also known as a cyclometer or cyclocomputer, is a device that works much like the instrument panel in a car. It attaches to your bike and displays or records trip information. The information is displayed on the head unit which is generally mounted on the handlebars of your bike. With technology, some smartwatches can also be used as a head unit. A bike computer will usually consist of four main parts: Most models of bike computers will display information such as current and maximum speed, distance traveled, time of day, and temperature. More advanced models will also include such information as altitude, GPS data, heart rate and even power output. Why Use a Bike Computer? Bike computers are used by every style of rider; from the casual to the course trainer. You can use a bike computer both for fun, and to track your trip distance and time, or you can use it as motivation to be even better next time. As Veeder Manufacturing Company, the inventor of the cyclometer, said in their promotion slogan: The most obvious of these benefits is in the distance traveled. Knowing how far you have gone helps in training as well as your early morning ride. Coupling distance with time or speed will benefit you by providing motivation to always beat your best. With the ability to track your heart rate and power production, you will know if you need to change gears for that aerobic workout or taper things off to maintain your preferred heart rate. Healthy, active lifestyles begin by knowing where you are at and knowing where you want to be. Having a cycling computer on your handlebars will help you, in real time, know just how far you have to go to get there. How Does a Bike Computer Work? A bike computer uses sensors placed in various positions around your bike to send data information to a transmission. This transmission converts to the head unit computer. Once the computer has the data, it transforms it into human-readable information and displays it on the head unit LCD screen. Type of Sensors There are two types of sensors: Each type has its advantages and disadvantages. Magnetic Sensors Magnetic sensors are generally used for cadence and speed. A magnet is mounted to the spoke of a wheel or the crankarm. A sensor is then mounted on the frame or front fork of the bike and reads every time the magnet passes the sensor. Because the magnetic field is strong, these sensors are immune to dirt, dust, water or mud. The accuracy can be counted on in any condition. This data is then sent to the head unit by the transmission to be displayed on the screen for the rider. While the GPS sensors can easily be moved between bicycles, they are more expensive. One downside to a bike GPS computer is that the sensor runs on rechargeable batteries that will need to be regularly maintained. Types of Data Transmission There are two types of data transmission from the sensors to the head unit: The best bike computer for you depends on the type of rider you are casual, enthusiast or competitive as well as the type of bike you ride road , mountain , hybrid , etc. Wired Transmission Wired transmission models are simply sensors with a wire that must be attached to the bike frame leading to the head unit. Besides the tangle of wires that need to be properly installed, the downside to a wired transmission is that they are not easily swapped between bikes. These are generally lighter units than wireless making them better for light bike needs. However, they are not the best option for mountain bike computers because the wires can come loose, get cut or ripped off the frame. Wireless Transmission Wireless transmission uses a signal to send data to the head unit instead of a wire. The best bike computers with GPS are going to be wireless. Because of their nature, wireless units are generally heavier than wired units. This could be a problem for those looking to save on the overall weight, such as competitive riders. Road riders will appreciate the inexpensive and durable wired units, while mountain bikers and competitive riders will like the efficiency and reliability of wireless units. No two models are alike and each will come with different features and measurements. Deciding what features you require and what features you want will help you determine the best bike computer for you. Basic Functions The basic functions of nearly all bike computers are standard. You will find functions and features such as: Your travel speed is measured by an algorithm based on the data sent to the head unit from the sensors. Cadence is all about rhythm. Being able to monitor your revolutions per minute is important to

maintaining a rhythm. How long you have been riding is important to know for most riders, even casual ones. This basic functionality will display on the head unit in minutes and hours. The obvious feature allows you to know what time it is without taking your attention off the road. Because you may be riding without a watch or able to look at your cell phone, displaying the time of day is vital for all riders. Calculating your average speed and being able to see a readout if you are over or under is a great motivation. The distance you travel and the trip you take to get there are vital to knowing how well you are improving. Daily rides that are the same length with faster times will tell you that you are improving your skills. Every rider should know how far they have gone. The odometer keeps track of your trip distance as well as overall distance. This vital information is important for keeping track of maintenance as well as milestones. Depending on your riding style these advanced features may prove more useful to you. When training or riding to improve your health, being able to monitor your heart rate is essential. Advanced bike computers will be able to monitor your heart rate and provide real-time feedback on the head unit. Conditioning is important to the advanced rider. Being able to maintain cadence, speed and rhythm at any altitude is important. Hills are inevitable when riding a bike. If you use hills to train or increase production then being able to monitor your ascension and descent is vital. Knowing the changes in temperature will allow you to maintain your stamina as well as hydration. More advanced models can even sense your gear changes. Keeping you informed of shifting can help provide a smooth and efficient ride. Features Whether you choose wired or wireless transmissions, magnetic or GPS sensors, or basic or advanced functions, each bike computer will have various features. These features will come into your decision on which model to purchase. Installation and functionality will play a large part in your buying experience. The features listed here will explain what you should look for and the purpose of each one.

**Rear Wheel Sensor** Some models will offer the use of a rear wheel sensor. These usually tie in with the cadence sensor on the crankarm and use a wire mounted to the frame to the head unit. When looking for a rear wheel sensor, be sure that the model is designed for it. Most wheel sensors are designed to be mounted on the fork of the front wheel. Because of the chain, pedals and gears, mounting on a rear wheel can have disadvantages. You may be required to extend the cable, or if you are using a wireless sensor, it may not have a strong enough signal to reach the head unit. Having a bike computer that is water resistant is an important feature to look for. While your sensors are generally going to be weatherproof especially the magnetic sensors, the head unit may only be water resistant. You should ensure that it is rated for water resistance and take the needed precautions when riding in the rain or after a rain shower. Checking your head unit for cracks or damage should be a part of your pre-ride routine.

**SmartPhone Pairing** A lot of the best bike computers will offer the advantage of pairing with your smartphone. Either using apps or monitoring. While smartphone pairing is still less accurate, you can use a smartphone, or smart watch instead of a head unit. When using your smartphone as a head unit, you have certain advantages such as a larger display and easy to read mapping capabilities. However, you will need a special mount for the phone and without the proper case, there will be less weather resistance and greater risk of damage in an accident. You can transfer your data to a computer, for example. Using a satellite signal to transmit your ride data is very accurate and efficient. The downside to bike GPS computers is that they require a strong signal which can be affected by weather, location and availability. Mounting the GPS is easier than standard mounts as there are no wires. This means they can be transferred between bikes effectively. That alone could save you money by not having to purchase multiple bike computers. The units are heavier, though, and for competitive riders may not be the best option. Heart rate monitors, skin temperature monitors and even electric bikes.

**Multi-Bike Options** Most non-casual riders have more than one bike.

**Chapter 2 : Best of Both Worlds: The Best Hybrid Bikes - I Love Bicycling**

*Cycling glasses are an essential item for most riders throughout the year. In the summer, they provide a traditional use and keep the sun out of your eyes - but through the rest of the year they.*

Cycle sport Shortly after the introduction of bicycles, competitions developed independently in many parts of the world. Early races involving boneshaker style bicycles were predictably fraught with injuries. Large races became popular during the s "Golden Age of Cycling", with events across Europe, and in the U. At one point, almost every major city in the US had a velodrome or two for track racing events, however since the middle of the 20th century cycling has become a minority sport in the US whilst in Continental Europe it continues to be a major sport, particularly in the United Kingdom, France, Belgium, Italy and Spain. The most famous of all bicycle races is the Tour de France. This began in , and continues to capture the attention of the sporting world. As the bicycle evolved its various forms, different racing formats developed. Road races may involve both team and individual competition, and are contested in various ways. Recumbent bicycles were banned from bike races in after Marcel Berthet set a new hour record in his Velodyne streamliner Track bicycles are used for track cycling in Velodromes , while cyclo-cross races are held on outdoor terrain, including pavement, grass, and mud. Cyclocross races feature man-made features such as small barriers which riders either bunny hop over or dismount and walk over. Time trial races, another form of road racing require a rider to ride against the clock. Time trials can be performed as a team or as a single rider. Bikes are changed for time trial races, using aero bars. In the past decade, mountain bike racing has also reached international popularity and is even an Olympic sport. Professional racing organizations place limitations on the bicycles that can be used in the races that they sanction. For example, the Union Cycliste Internationale, the governing body of international cycle sport which sanctions races such as the Tour de France , decided in the late s to create additional rules which prohibit racing bicycles weighing less than 6. The UCI rules also effectively ban some bicycle frame innovations such as the recumbent bicycle by requiring a double triangle structure.

Bicycle infantry The bicycle has been used as a method of reconnaissance as well as transporting soldiers and supplies to combat zones. In this it has taken over many of the functions of horses in warfare. In the Second Boer War , both sides used bicycles for scouting. Germany used bicycles again in World War II, while the British employed airborne "Cycle-commandos" with folding bikes. The last country known to maintain a regiment of bicycle troops was Switzerland, which disbanded its last unit in

Activism[ edit ] Two broad and correlated themes run in bicycle activism: San Francisco Critical Mass , April 29, It is generally agreed that improved local and inter-city rail services and other methods of mass transportation including greater provision for cycle carriage on such services create conditions to encourage bicycle use. However, there are different opinions on the role of various types of cycling infrastructure in building bicycle-friendly cities and roads. Some bicycle activists including some traffic management advisers seek the construction of bike paths , cycle tracks and bike lanes for journeys of all lengths and point to their success in promoting safety and encouraging more people to cycle. Some activists, especially those from the vehicular cycling tradition, view the safety, practicality, and intent of such facilities with suspicion. Some groups offer training courses to help cyclists integrate themselves with other traffic. Critical Mass is an event typically held on the last Friday of every month in cities around the world where bicyclists take to the streets en masse. While the ride was founded with the idea of drawing attention to how unfriendly the city was to bicyclists, the leaderless structure of Critical Mass makes it impossible to assign it any one specific goal. In fact, the purpose of Critical Mass is not formalized beyond the direct action of meeting at a set location and time and traveling as a group through city streets. There is a long-running cycle helmet debate among activists. The most heated controversy surrounds the topic of compulsory helmet use. Headquarters of the Union Cycliste Internationale in Switzerland Cyclists form associations, both for specific interests trails development, road maintenance, bike maintenance, urban design, racing clubs, touring clubs, etc. Some bicycle clubs and national associations became prominent advocates for improvements to roads and highways. In the United States, the League of American Wheelmen lobbied for the improvement of roads in the last part of the 19th century, founding and

leading the national Good Roads Movement. Their model for political organization, as well as the paved roads for which they argued, facilitated the growth of the automobile. Regular conferences on cycling as transport are held under the auspices of Velo City ; global conferences are coordinated by Velo Mondial. A Dutch study found that cycling can extend lifespans by up to 14 months, but the risks equated to a reduced lifespan of 40 days or less. The physical exercise gained from cycling is generally linked with increased health and well-being. According to the World Health Organization , physical inactivity is second only to tobacco smoking as a health risk in developed countries, [34] and this is associated with many tens of billions of dollars of healthcare costs. The charity Sustrans reports that investment in cycling provision can give a In this regard, cycling is especially helpful for those with arthritis of the lower limbs who are unable to pursue sports that cause impact to the knees and other joints. Since cycling can be used for the practical purpose of transportation, there can be less need for self-discipline to exercise. Cycling while seated is a relatively non-weight bearing exercise that, like swimming , does little to promote bone density. However, excessive cycling while standing can cause knee damage [39] [ not in citation given ] It used to be thought that cycling while standing was less energy efficient, but recent research has proven this not to be true. Other than air resistance, there is no wasted energy from cycling while standing, if it is done correctly. In particular, cycling is commonly used within knee rehabilitation programs. Bike at Prins Hendrikkade Amsterdam. As a response to the increased global sedentary and consequent overweight and obesity , one response that has been adopted by many organizations concerned with health and environment is the promotion of Active travel , which seeks to promote walking and cycling as safe and attractive alternatives to motorized transport. Given that many journeys are for relatively short distances, there is considerable scope to replace car use with walking or cycling, though in many settings this may require some infrastructure modification, particularly to attract the less experienced and confident. Bicycle safety Virgin Mary venerated as the holy protector of bicyclists on the roads of the mountainous Basque Country Cycling suffers from a perception that it is unsafe. Despite the risk factors associated with bicycling, cyclists have a lower overall mortality rate when compared to other groups.

### Chapter 3 : 5 Of The Best Women's Cycling Shorts - I Love Bicycling

*A hybrid bike is just what it sounds like - a cross between a road and a mountain bike. Versatile in nature, the best hybrid bikes can be used over a variety of terrain and are popular with commuters and casual cyclists. The flat handlebars on a hybrid bike offer a more upright position that can.*

Best of Both Worlds: Versatile in nature, the best hybrid bikes can be used over a variety of terrain and are popular with commuters and casual cyclists. The flat handlebars on a hybrid bike offer a more upright position that can minimize the strain that can come from the more aerodynamic position on a road bike. Not all hybrid bikes are created equal, and there is a lot of variety within the hybrid category. The Benefits of a Hybrid Bike

More terrain – Most hybrids are suited to go off or on road, so this gives you more options for your weekend adventure or daily commute. Wide tires – A hybrid can have a selection of fairly wide tires, which aids comfort and allows for various levels of off-road riding. Easy to customize for commuters – Most standard hybrids are fitted for racks and mudguards, making it a popular choice for commuters. Overall flexibility – Hybrids package quality and a variety of features at an affordable price. For a cyclist who rides slightly rough trails, flat city roads, bike paths, and the occasional sidewalk, the hybrid meets most purposes halfway. Although the fork may not be on par with the average mountain bike, it certainly takes the edge off on rough terrain.

Cannondale Quick CX 3 Price: The CX 3 is the middle of the road option, with a 50mm fork with lockout. Overall it handles well and is durable, but is quite heavy for the commuter or urban adventurer. Although it may not be ready to hit any technical trails, the Gravel Disc alloy fork will have you easily tackling gravel roads and dirt paths. The Haanjo features butted and formed aluminum tubing to bring together a combination of light weight, strength, and durability. The mechanical disc brakes offer some serious stopping power, and the big tires will have you rolling through the rough patches. With a classic design and all steel frame, there is tire clearance for a up to a 38c tire a great option for bad weather riding. The Strada has cantilever brakes which are less powerful than disc brakes, but are much easier to maintain. Like most hybrids, there are mounts for racks and fenders, but there are also mounts for front panniers.

Trek FX 3 Price: Also known as a fitness bike, the FX is lightweight, fast, fun, and agile. The aluminum frame comes rack and fender ready, with the added DuoTrap S, which integrates a Bluetooth sensor into the frame. You can easily log routes and track your progress with a computer or smartphone, with no external sensor.

Diamondback Insight 1 Price: The aluminum frame is lightweight and durable, and will hold up on winding urban streets and rougher roads alike.

Carbon Hybrids Felt Verza Price: It is capable as a commuter, a weekend cruiser, or a workhorse for group rides, giving you the freedom to define what kind of rider you want to be.

Fuji Absolute Carbon Price: Its full-carbon fork keeps you on locked on track and includes hidden fender mounts, while the aluminum wheels keep the rolling weight low and easily handle rough roads. You pay the price for the carbon frame, but it could be worth it if you are a serious cyclist looking for something a bit more flexible than your road racing bike.

**Chapter 4 : 5 of the Best Cycling Documentaries to Watch on Netflix**

*The Best Bike Cities in America. From building bike lanes to boosting bike share to installing bike-specific traffic signals and simply creating more fun places and ways to ride, here's our.*

Harvard Health Letter The top 5 benefits of cycling Going for a ride is good for your heart and muscles, and it may improve how you walk, balance, and climb stairs. Check out the main physical benefits. When you sit on a bike, you put your weight on a pair of bones in the pelvis called the ischial tuberosities, unlike walking, when you put your weight on your legs. Pushing pedals provides an aerobic workout. In the power phase of pedaling the downstroke , you use the gluteus muscles in the buttocks, the quadriceps in the thighs, and the gastrocnemius and soleus muscles in the calves. In the recovery phase backstroke, up-stroke, and overstroke , you use the hamstrings in the back of the thighs and the flexor muscles in the front of the hips. Cycling works other muscles, too. You use abdominal muscles to balance and stay upright, and you use your arm and shoulder muscles to hold the handlebars and steer. It helps with everyday activities. Safety considerations Get the okay from your doctor before you climb aboard a bike, especially if you have heart disease, arthritis, or thinning bones. Another fall could make it worse. Tips to choose equipment You probably know that a helmet is a must for safety. The right type of clothes and bike will also make cycling safer and more comfortable. These have high-tech fibers that wick away moisture. Bike shorts have a thick pad or chamois to prevent chafing and provide cushioning. Look for one that puts less stress on your body, such as a beach cruiser or comfort bike. If mounting a bike is difficult, there are even "step through" bicycles that feature top tubes just six inches off the ground see photo. Other bike types include tricycles, which are helpful if you are less stable on your feet, and recumbent bikes that allow you to lean back and ride. But if you have a herniated disk, the bike can make the disk bulge more," says Dr. Go even further with a saddle that relieves pressure on the perineum, the area between those bones, behind the genitals. Pressure-relieving saddles may have a "noseless" or horseshoe design.

### Chapter 5 : The top 5 benefits of cycling - Harvard Health

*Using a bike computer is a great way to set goals and track cycling progress. However, if you've done any shopping around, you're aware of how expensive it can be. Mobile apps have even gotten.*

A solid pair of cycling shorts with a good chamois will allow you to feel more comfortable, powerful and in control while on the bike. It will also allow you to ride for longer periods of time without discomfort. Chamois You want the shorts to fit tight with no bunching material that could potentially chafe later. Leg Grippers Every company and model uses different leg gripper technology. Some use a compression fabric that is tapered around the thigh while others use a silicone band to keep the short from moving. Inseam Length This is based on personal preference and how long your legs are. Bibs or No Bibs? Bib shorts are a cycling short that have shoulder straps like suspenders. The design eliminates the pressure of exercising with a tight waistband which can become irritating when you are hinged at the waist and pedaling. However the main problem bibs pose to women is taking them off for pee breaks. This can be especially exasperating when having to pee during a winter ride when you have to take off multiple layers. The Evolution Shorty has a comfortable waistband and a high-grade chamois for comfort at an affordable price. The short is manufactured from a blend of lycra making it light-weight and wicking. The short comes complete with a SnapLock fastener making it easy to slip out of for those necessary pee breaks. The Mondiale Bib Short is top of the line for those long endurance training rides or fondos as its fabric and chamois thickness opts for comfort versus aerodynamics. The leg gripper is a wide compression material with a silicone band for comfort while keeping the short in place to avoid chafing. This short is an investment but one you will not soon regret. The aerodynamic cut and minimal stitches provide a high-end race-day garment. This pair of bib shorts also comes with detachable straps for ease of taking bathroom breaks. This short comes in several colors and has a rainbow band along the leg gripper for an added splash of color. This short is affordable and will still give any woman the comfort of riding without a waist-band Price:

### Chapter 6 : On your bike: the best books about cycling | Books | The Guardian

*Out of 50 cities, Tucson ranked No. Seattle took first place. The site, calendrierdelascience.com, ranks cities on a point system based on safety, friendliness, energy, and culture. "The ones that top.*

### Chapter 7 : 5 Best Bike Computer Reviews - Edition - Top Choices For Cycling

*The Bible isn't about finding our favorite bikes, it's about finding out where each bike is best--which bike works where. It's about making sure you, the reader, have enough information to go into the world and make an informed decision on your next mountain bike.*