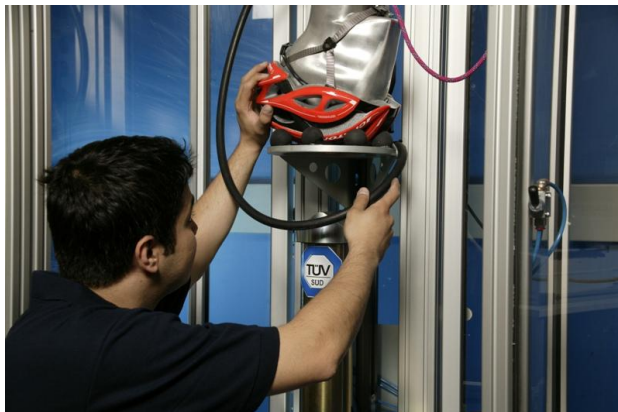


TÜV SÜD gives advice about buying and wearing cycle helmets

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Cycle helmets: Look after your head!

Munich. Many cyclists will use the first warm days of spring to start the cycling season. Bicycle helmets should be among the essentials on every tour. TÜV SÜD's sports equipment professionals explain what to look out for when buying and wearing a cycle helmet.



In a series of tests at their test rig for helmets, TÜV SÜD's product professionals verify that cycling helmets comply with the safety requirements.

Photo: TÜV SÜD

TÜV SÜD's tips on making the right choice

- A cycle helmet must **fit snugly** to offer protection, and **look good** to ensure it is worn. Given this, cyclists should always try on a number of helmets before making a purchasing decision. The best approach is to go to a **specialist store** which offers a wide choice of different models, to obtain all the necessary information and have any questions answered. Cycling enthusiasts buying their helmets from a discounter should also not buy the protective headgear without trying it on first.

- **Comfort and looks are important, especially for children.** Children who are allowed to choose their helmets themselves and pick out a cool design will be more inclined to wear them than kids who get a helmet forced upon them by their parents.
- Key selection criteria are **size and fit: helmets must not be too loose and move around, nor must they be too tight.** They must sit squarely and firmly on the head to avoid slipping if the cyclist takes a tumble. TÜV SÜD's experts advise never to buy a helmet where a snug fit is created by the sizing ring alone. In other words, when buying a helmet for your children never go for a size bigger with the idea that they can wear it longer.
- **As a quick test** before making a purchase, try the helmet on so that it sits on the forehead just above the eyebrows, but does not restrict your vision. Adjust the sizing ring but do not buckle the chin strap. Now shake your head. If the helmet remains firmly seated on your head and does not fall off when you bend forward, fit and adjustment are correct.
- Nowadays, the soft foam pads used to adjust helmets to **individual head sizes** have frequently been replaced by individually adjustable **dial fit or slider systems.** With these systems, helmets can be adjusted in the blink of an eye – a very convenient solution for cyclists who wish to wear a thin headscarf or a special under-helmet hat in cold weather. A thick hat should not fit under the helmet, as this would mean that the helmet would definitely be too large when worn without a hat.
- **Quick-release or adjustable easy lock system** on the chin strap? This is a mere matter of taste. The important thing is to make sure you always buckle your chin strap. Tighten it until no more than one finger fits under the strap. To ensure

the helmet stays in the right position, the strap dividers of most helmets are positioned between the ear and the jawbones.

- By looking at the number and size of the **vents**, even amateurs will be able to tell whether they will keep a cool head under a helmet. For hot summer days and sporting cyclists TÜV SÜD's experts recommend helmets that are well vented. For "pleasure" riders and cyclists who only ride their bikes over short distances or frequently cycle in cooler weather, vents are not so important.
- **Many helmets are supplied with anti-insect mesh on the front vents** to keep bees and other insects out. After all, an insect caught between the shell of the helmet and the head may irritate and distract the cyclist and thus prove dangerous.
- Today, the **weight of a helmet** no longer plays a role in the purchasing decision. Almost all modern cycle helmets sold on the market are sufficiently lightweight, frequently weighing under 300 grams. The helmet weight is given on the inside of every helmet.
- For a helmet to perform its protective function it must be worn correctly and thoroughly maintained. Hence, the **manufacturer's instruction manual is important**. Before buying a helmet, cyclists should take a critical look at the manual and check that it is easy to understand. Even if the specialist shop provides plenty of tips and advice, the manufacturer's manual is still important for product-specific information. Cyclists should always keep the instruction manual in case questions or warranty claims may arise later on.
- Always **keep the receipt**. Some manufacturers offer to trade in old helmets when you buy a new helmet of their brand.

- The **GS mark (tested safety)** and the TÜV SÜD Octagon provide guidance on making the right choice (see also additional information on testing provided at the end of the text).

TÜV SÜD tips on the correct use of helmets

- Before starting out on your first tour with the helmet, **carefully study the instruction manual** and thoroughly adjust the chin-strap buckle, the strap dividers and the straps on the helmet. Spend extra time on these tasks in preference to starting out with an incorrectly positioned or wobbly helmet.
- Do not apply **any stickers** to the helmet as they may harm the material and, in a worst-case scenario, reduce the helmet's protective effect. On this issue, parents should assert themselves over their children's wishes.
- Intensive UV radiation and **high temperatures** cause the material to fatigue. Hence, helmets should not be placed on the rear shelf of cars or left in the boot in scorching temperatures.
- As **material fatigues**, which means loss of protective function, the helmet should be replaced **after three to five years**. Manufacturers frequently give some indication of the useful life of their products in the manual.
- Modern, lightweight cycle helmets are designed **for one single, serious impact**. After suffering such an impact, the helmet must be replaced, warn the TÜV SÜD experts. This even applies if no damage is visible on the helmet. Cyclists are best advised to make the helmet unusable to prevent it from being used by mistake. But note that it may also be possible to trade in the helmet when buying a new one – as described above.

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- When it comes to **cleaning** the helmet, the manufacturer's information in the instruction manual must be taken into account.

Additional information on testing:

Cycle helmets must conform to the European standard EN 1078 (helmets for pedal cyclists and for users of skateboards and roller skates). The standard addresses various issues including field of vision, material performance in heat, cold and rain, strap durability and, of course, shock absorption in the case of a fall. The product professionals at TÜV SÜD Product Service subject the cycle helmets to a battery of tests on their test rig. Some examples of the wide variety of tests are: to test the shock absorption effect, the helmet plus the test headform (= the dummy of a cyclist's head, weighing four to six kilograms) is dropped from a height of 1.5 metres onto a flat anvil. A test in which the helmet plus headform is dropped from a height of one meter onto a kerbstone anvil (90-degree edge) checks whether the head can come into direct contact with the edge of the kerbstone, for example through a vent, or whether the head is still protected in this case. The "chinstrap test" examines the strap for strength and elongation, checks the strength of the strap lock and verifies that the straps are securely fastened to the helmet. In the "roll-off test", TÜV SÜD's product professionals determine whether, in the case of an accident, the strap system will retain the helmet on the head or whether the helmet can come off the headform.

Note for editorial staff: The photo of the helmet test rig can be downloaded in camera-ready resolution from the "Current Press Photos" category www.tuev-sued.de/pressefotos. Further photos of product testing at TÜV SÜD can be found at the "Products" main category.

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