Behavioural recommendations for cyclists in the event of having suffered a concussion

(share with athlete)

Important: good communication and increased awareness of athletes, coaches, supervisors, teachers, parents, medical personnel for an individual plan.

First 24–48 hours

- relative (not strict) physical + cognitive rest, light physical activity possible (e.g. walk without increasing symptoms)
- General: drink more initially, eat only later (nausea), no alcohol, no sleeping pills, aspirin, anti–Inflammatory drugs or strong painkillers, no driving!
- Reduction of audiovisual stimuli (no computer, phone, social media, reading, Netflix, visitors, interviews, ...), reduce screen time first 48 hours
- if necessary intake of magnesium (cell stabiliser), check progress after 1-3 days

1. Gradual return to mental activities (eg. school / study)

Duration: each stage individually, depending on symptoms, min. 24 hours, max. mild provocation / exacerbation in symptoms=max. 2 points (on scale 0-10)

Level	Activity (examples)	Goal
1 daily activities max. mild provocation / exacerbation in symptoms	5-15 min. gradually increase reading, screen activities (computer, telephone, SMS, mails, social media, WhatsApp)	gradual return to typical activities reach level 2
2 school / study activities	30-90 Min. reading, cognitive activities, homework outside the classroom	increase tolerance to cognitive work Aufstieg reach level 3
3 return to school / study part time	gradual return to school: start later, finish earlier, longer / more frequent breaks, avoid noisy rooms (cafeteria, music / sports lessons), more time for (possibly shorter) tests / tasks	increase cognitive / academic activities reach level 4
4 return to school / study full time	gradual increase in school activities, until normal school day possible with max. mild provocation / exacerbation in symptoms	return to full academic activities and catch up on missed work (tutoring if necessary)

adaptierte Version auf Basis SCAT6 – Concussion in Sport Group 2023 /

2. Gradual return to sporting activities (cycling-specific)
Duration: each stage individually, depending on symptoms, at least 24 hours

- Compliance with the behavioural recommendations page 1
- Stage 4-6 only after all symptoms, clinical and cognitive abnormalities / restrictions without and with stress have subsided

* max. mild provocation / increase in symptoms=max. 2 points (on scale 0-10)

Stufe	Aktivität (Beispiele)	Ziel
1 Recovery I no increase symptoms	15–30 Min. daily routine, light aerobic activity (walk, indoor bike, slow pace) intensity: max. 55% FTP, RPE 6–8	gradual return to everyday activities / work reach level 2
2* Recovery II A – light B – moderate	45–60 Min. light training (indoor bike, moderate speed, maybe outdoor, no vibration / impacts!) A: intensity: max. 55% FTP, RPE 6–8 B: intensity: max. 70% FTP, RPE 9–10	increase heart rate reach level 3
3* Endurance	90–120 Min. endurance pace, no risk of head impact! no / low vibrations / impacts! intensity: max. 75% FTP, RPE 11–12	increase intensity / duration reach level 4
4* Tempo Efforts	120–150 Min. endurance pace, no risk of head impact! no / low vibrations / impacts! intensity: max. 70% FTP, RPE 11–12 + 1–2x max. 10–15 min. tempo efforts intensity: max. 85% FTP, RPE 13–14	increase intensity / thinking / duration / coordination reach level 5
5* Threshold Normal Training	150–180 Min. discipline–dependent normal training endurance pace, risk of head impact reduced! intensity: max. 70% FTP, RPE 11–12 + 1–3x max. 10–15 min. FTP Efforts intensity: max. 100% FTP, RPE	regain confidence / functional skills reach level 6
6 Return to Sport / Competition	discipline–dependent normal training variable intensity: VO2 max, anaerobic capacity capacity, neuromuscular elements, increase in number of repetitions, etc.	no limitations full integration into normal training / competition

adapted version based onSCAT6 – Concussion in Sport Group 2023 / Trainingsbereich BaSpo/EHSM FTP = functional threshold power, RPE = rating of perceived exertion (Borg–Skala 6–20)