

A black and white photograph of a cyclist in a white helmet and sunglasses riding a road bike on a paved path. The cyclist is wearing a jersey with 'Cycling' visible on the front. The background shows a blurred crowd of spectators and a metal barrier.

Training for Cycling

By Gina Kraft, PhD, ATC, CSCS

Why am I here?

Degrees in Exercise Science
Strength and Conditioning Specialist
Raced as amateur

Rise in popularity of cycling



Discussing...

Equipment

Importance of proper bike fit

Aerobic training for cycling

Strength training for cycling

Flexibility training for cycling

Common injuries and prevention strategies



Equipment

Need a bike

Weight vs cost

Type of bike











Equipment

Need a bike

Weight vs cost

Type of bike

Saddle





vs



Equipment

Need a bike

Weight vs cost

Type of bike

Saddle

Helmet



Equipment

Need a bike

Weight vs cost

Type of bike

Saddle

Helmet

Gloves



Equipment

Need a bike

Weight vs cost

Type of bike

Saddle

Helmet

Gloves

Shoes and pedals





May also want:

HR monitor

Speed/cadence sensor

Cyclocomputer

Power meter?



Proper Bike Fit...

...is

your BEST

injury prevention

strategy



Proper Bike Fit

- Use a professional
- Start with saddle height
- Adjust saddle tilt
- Adjust saddle fore/aft
- Adjust cleat placement
- Adjust handlebars



Aerobic Training



Base miles

Pros

- Great fitness base
- Easier to perform outside

Cons

- Increases risk of overuse injuries
- Time intensive

Interval training

Pros

- Quickly improves fitness level
- Easier to perform inside
- Not as time intensive

Cons

- Requires ample recovery time
- Overtraining risk

Interval Training

Time Based:

Structured for LT

Structured for VO_{2max}

Alter intensity,
duration, and rest

Other:

Terrain Based

Partner Based



Aerobic Intervals

>60 sec

$\geq 85\%$ HR_{max}

1:1 work to rest ratio

HR should drop to 120-130 bpm



Anaerobic Intervals

~30 sec

Maximal intensity

Longer recovery times (1:2 to 1:5)



Aerobic Training - Continuous, High-Intensity Training

Improves lactate threshold
 $\geq 80\% \text{VO}_{2\text{max}}$
20-60 min duration



Aerobic Training

Cross training

Indoor vs outdoor

Safety on the road



Resistance Training

Strength to weight ratio important

Upper body

Neck and shoulders

Balance between quads and hamstrings

Gluteals need to fire correctly

Importance of closed chain



Flexibility Training

Hamstrings

Hip flexors

Neck and shoulders



Most Common Injuries (and Prevention)

A black and white photograph of a cyclist in a white jersey and helmet riding a road bike on a track. The cyclist is leaning forward in a racing position. The background is slightly blurred, showing a crowd of spectators and a fence.

Knee pain

Adjust cleat placement

Neck and back pain

Adjust handlebar position / perform shoulder shrugs

Wrist / forearm numbness

Stretch, gloves, handlebar tape, wrist position

Urogenital problems

Better fitting seat / cycling shorts

Foot numbness or tingling

Wider shoes / cleat placement

Best Injury Prevention Strategy

A black and white photograph of a cyclist in a white helmet and sunglasses riding a road bike on a paved surface. The cyclist is wearing a jersey with 'SEVEN' visible on the back. The background shows a blurred crowd of spectators and a metal barrier.

Proper bike fit

Recheck fit periodically...Just because it fit last year does not mean it still fits today

Summary

Best aerobic is combo of intervals and base miles

Strength train for quad:hamstring balance

Don't ignore the upper body

Stretch hamstrings and hip flexors!

