

The Daily Practice Cooking to Perfection



New Mexico Track & Field Coaches Clinic 2022

“I am happy. My coaches had presented me with many great practices. My body felt so light.”

Joshua Cheptegei
12:35.36



Outline of Cooking to Perfection Presentation

- Athletic & cognitive skills recipes.
- Teaching & coaching skills.
- Goals of a daily practice.
- Techniques used in daily practices.
- Differences in workouts throughout the season.
- Take-home points.

Athletic Skills

The Primary Physical Performance Components *(It's Not Just Running)*

- Strength
- Speed
- Flexibility
- Coordination
- Endurance

Distance Running is a Continuous Change of Shapes

1. Does the runner have the specific strength to hold a necessary shape?
2. Does the runner have the coordination and flexibility to transition to the next shape?
3. Does the runner have the speed to transition quickly to the next shape?
4. Does the runner have the ability to economically change shapes over extended periods of time?

Where Many Coaches Work



Coaching Distance Runners Then & Now

Then

Training Volume

Max Strength

Template Postures

Quantity of Ground Forces

Strength Emphasis

Block Periodization

Now

Training Quality

Functional Strength

Individual Postures

Quality of Ground Forces

Coordination Emphasis

Prescriptive Periodization

What Cognitive Skills Should be Developed at Practice?

- Attention (to relevant cues)
- Anticipation (based on correct reading of cues)
- Concentration (sustained focus over time)
- Memory retrieval (solving problems from past experiences)
- Automaticity (attention to only a few details, the rest are under automatic control)
- Creativity (develop new insights that are novel and effective)

Teaching Points for Developing Athlete Decision-Making Skills

- Wholistic training
- Competition-like drills
- Decision-making emphasis
- Deliberate practice
- High variability
- Reduced, delayed, summary feedback
- High levels of questioning
- Extensive use of video and other feedback
- High levels of athlete cognitive engagement & effort

Daily Goals of Distance Practice

- Develop the aerobic and anaerobic components necessary for the event.
- Develop/increase durability.
- Increase speed of movement.
- Improve functional strength.
- Work toward a goal.
- Build mental toughness.
- Improve self-esteem.
- Raise the ability to collaborate.

Practice Template

1. Announcements and workout emphasis
2. Warm-up, mostly dynamic
3. Technical or Max Speed
4. Speed Endurance
5. Endurance
6. Cool Down
7. Coordination
8. Strength
9. Flexibility
10. Debrief

The Warm Up Unit

U

Low Intensity Warm-up

- Designed for those low force production aerobic sessions.
- Allow 10 minutes. Eliminate jogging.
- Walking step lunges.
- Emphasize ground gymnastics.
- Agility running in multiple directions.
- Range of motion arms & shoulders.

High Intensity Warm-up

- Designed for those high force production aerobic, hill, and most anaerobic sessions.
- Allow 15-20 minutes.
- Everything from the low impact warm up.
- Add a vertical component: skipping, bounding, mini hurdle hops, skip-skip-lunge, backward thrusts, etc.
- Add short sprinting runs.

Race Day Warm-up

- Designed for races, time trials, max velocity, and speed endurance sessions.
- Allow 30-60 minutes.
- Everything from the high intensity warmup.
- Before the sprints add 1 minute each of 5k pace, 1 mile pace, and then 800 pace. Get progressively faster.

The Technical Unit

Max Speed Work

- 2-3 mi Race Day warm-up
- 6-8 x 30 meters on the fly on the track
- 3 min rest between each repeat
- 4 mile continuous run
- Cool down



30 Meter Flys



The Endurance or
Sub-Maximal Speed Unit

The Main Workout

Choosing the Proper Training Tool

- Aerobic workouts are mainly done with bouts of continuous runs.
- Anaerobic workouts are mainly done with bouts of interval or repetition runs
- Interval & repetition runs are work bouts punctuated with periods of incomplete rest following the rule of 2/3.

The Ingredient List

| | | |
|---------------|---------------------------------------|--|
| 100 meters | Acceleration & max speed | |
| 200 meters | Anaerobic capacity | |
| 400 meters | Anaerobic efficiency | |
| 800 meters | Anaerobic efficiency Aerobic power | |
| 1600 meters | Aerobic power | |
| 5000 meters | Aerobic power | |
| 10000 meters | Aerobic efficiency | |
| >10000 meters | Aerobic capacity | |
| | | |

Great Cooking Tool

Poor Application





Special Endurance 1



Hill Repeats



Speed Endurance



Long Run



Special Endurance 2



Recovery/Base Runs



Tempo Run



Max Speed



vVO2 max

TOOLS TO USE

Aerobic Work Done Continuously (Often Steady-State)

- **Recovery/Base Run** = more than 20 minutes, but less than an hour
- **Tempo Run** = 25-30 minutes
- **LT Run** = 35-50 minutes
- **Long Run** = 1 to 2 hours

Training intensity determined by percentage
of $\dot{V}O_{2\text{ max}}$

Anaerobic Work Done in Intervals or Repetitions

- Max Speed = 30-60 meters
- Speed Endurance = 60-150 meters
- Special Endurance 1 = 150-300 meters
- Special Endurance 2 = 300-600 meters
- $v\dot{V}O_{2\max}$ = 600-1600 meters

Training intensity determined by recovery interval.

Use Reference Marks

Aerobic Training Reference

- Heart rate
- Lactate measurement
- Percentage of $\dot{V}O_{2\text{ max}}$
- Perceived Effort
- Descriptive

Anaerobic Training Reference

- Percentage of max speed
- Percentage of 400 speed
- Lactate Measurement
- Perceived effort
- Descriptive

LT Aerobic Work References

4 mile continuous tempo run

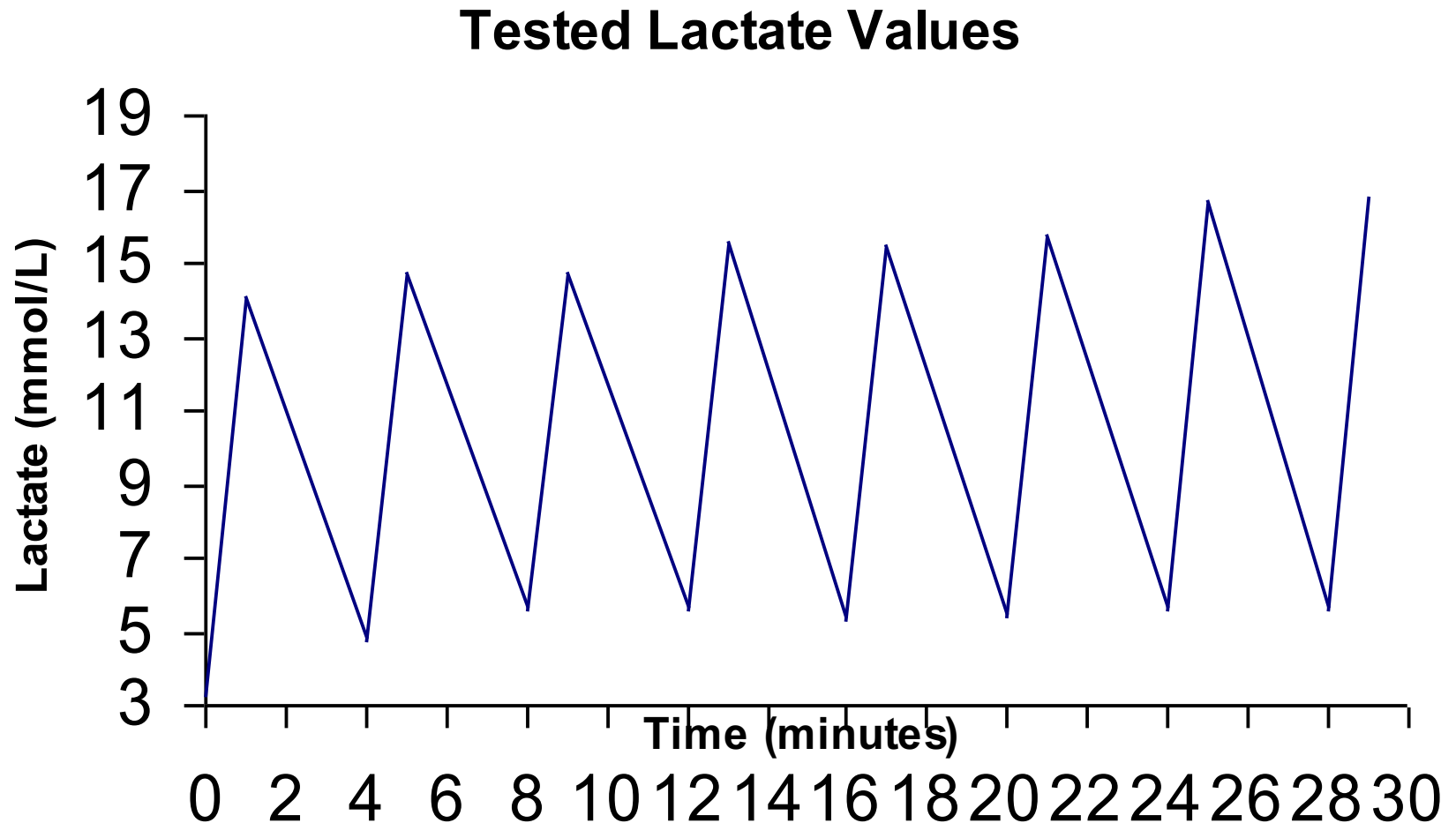
| | |
|----------------------------|--|
| Heart Rate | 80% of Max HR (212 bpm) = 171 bpm |
| Lactate | Lactate threshold = 3.2 mmol/L |
| $\dot{V}O_{2 \text{ max}}$ | 85% of 100% $\dot{V}O_{2 \text{ max}}$ |
| PE | 16 out of a scale of 20 |
| Descriptive | Medium pace or “just fast enough to discourage conversation” |

Special Endurance 2 Work References

8 x 400 repeats with 4 min recovery

| | |
|-----------------------------|------------------------------------|
| % of max speed (m/s) | 92% of max speed m/s |
| % of 400 speed | 95% of DP 400 speed |
| Lactate | 14-15 mmol/L end, 5-6 mmol/L start |
| PE | 19 out of a scale of 20 |
| Descriptive | Fast pace. Very tough workout |

An 8 x 400 Meter Day



vVO_{2 max} Work Example

VO_{2 max} pace workouts have their greatest training effect over the last half of the session.

- 2 mile active warm-up to same course.
- Extent of work is 7 x 800 meters. Intensity is maximum aerobic power effort. 3200 test time from last micro/divided by 4 is goal time for each bout.
- Work time = Rest time
- 2 mile cool-down. Elevate and stretch and then conditioning sticks.

The Strength Unit



The Coordination Unit



The Flexibility Unit



The Cool Down Unit

- After a hard run there are three stressors:
 - Body Temperature
 - Hydration Issues
 - Low Blood Glucose

Address these challenges in the listed order

Cool Down Protocol

1. After workout or race is done, immediately embark on an 8-10 minute slow jog.
2. Drink 16 oz of water from your own water bottle.
3. Do some light stretching.
4. Elevate legs for 8-10 minutes.
5. Drink 16 oz of sport drink within 20 minutes of stopping race or workout.
6. Eat a 700-1000 calorie meal within 2-4 hours.
7. Sleep 8-9 hours.

So, Let's Go to Distance Practice

- Do one of three 3 different warmup units:
LI, HI, or RACE.
- Do any speed unit or technical unit.
- Choose & do the endurance unit:
extent, volume, and intensity
- Do a strength unit that is appropriate for the session.
- Do a cool-down unit that follows or includes both flexibility & coordination.

Sample 800 Session

- Explain workout scope & goals
- 25 minute RD warmup
- 6 x 120 meters, 6 minutes active interval recovery
- 20 minutes of continuous plyometric circuits
- 4 x 10 hurdles of hip mobility
- 3 mile cool-down run
- 15 minutes static stretching & foam rollers

Sample 1600 Session

- Explain workout scope & goals
- 20 minute HI warmup
- 4 x 1600 meters, $\dot{V}O_{2\max}$ pace,
work time = active recovery interval
- 20 minutes of easy running
- 3 sets Gambetta circuits (10 each deep BW squats, R & L step lunges, BW squats then a jump)
- 15 minutes static stretching & foam rollers

Sample 3200 Session

- Explain workout scope & goals
- 20 minute LI warmup
- 7000 meter tempo run at LT pace
- 40 minutes of easy running
- 5 x 80 meter strides on football field
- 20 minutes body core work
- 15 minutes static stretching & foam rollers

Take-Home Points

- Cook up sessions that are multi-lateral.
- Add the proper balance and sequence of ingredients to training units.
- Make practice a learning experience recipe.
- Choose the proper practice tool to stimulate the desired training effect.
- Use continuous running, interval running, and repetition running practice design based on desired adaptation.