

TRAINING SPEED IN SWIMMING

Anthony Nesty, Head Swim Coach
University of Florida



Ideal Sprints

- ✓ Athletic Physiology – System (an aerobic system), musculature, Type II = white fibers
Athletic Tendencies
- ✓ Athlete make-up:
 - ✓ Body Type
 - ✓ Muscular build
 - ✓ White fibers
 - ✓ Functional strength
- ✓ How athletic is he or she
- ✓ Power ratio
- ✓ Body position



Training Fundamentals

- A. The Sprinter's System
- B. Training Methods
- C. S & C

Train the whole system:
Hypertrophy: Get faster = increase muscle = stay lean

Muscular Endurance:
White fiber development
Longer race improve?

The Aerobic Component:
Multi-Day meets
Multi-Event Days
Recovery



White Fiber Recruitment

- #1 Goal: Produce the largest amount of force possible both quickly & efficiently
 - #2 Anaerobic Training
 - #3 6-8 weeks to recruit consistent speed cycling
- Maintain throughout – yearly, monthly, weekly, taper cycle*

Training Chart:

- VO² Maz
- Anaerobic (hardcore training)
- Aerobic (conditioning/endurance)
- Weight Control (fitness)
- Moderate activity (maintenance/warmup)



How to Train: Energy System Cycling

- *Aerobic
 - *Anaerobic threshold
 - *Lactate Tolerance: 4-6 x100
 - *Lactate Production
- | | |
|--------|---------------|
| Dive | 4 x 50 @ 2:00 |
| 8 x 50 | 2 @ 1:30 |
| | 2 @ 1:00 |
- *Race Speed – Power + Speed Series



Sprinters Toolbox

- Tempo Trainers
- VASA or Tubing stations
- Surgical tubing
- Bands
- Fins/Paddles
- Snorkel
- Parachutes
- Towers



Monday AM


3x { 2 x 150 Buoy
50 (7)
50 (9)
50 (11)

Kick 100
2 x 75
3 x 50
4 x 25 Go

Effort

3x { 300 (24)
6 x 25 (26)
Dive 25 (28+)


75 EZ
6 x 50 (0)



Monday PM

2x { 300 scull/drill/swim w/ snorkel
2 x 150 drill/swim x 25
#1 BK, BR, Free
#2 Fly, BK, BR
300 scull/drill/swim
3 x 200 pull: Round #1: 1-3
Round #2: Fins & Paddles


3x { 2 x 50 kick
150 (28)
2 x 50 kick
2 x 100 (28+)
2 x 50 kick
100 (28++)



Tuesday & Thursday AM

3x { 6 x WL (15-18 mtrs) Set #1
50/2 x 25
Set #2: fins ↑↑
Set #3: + Pads ↑↑↑
= wt

3x { 3 x 50 | 1-3
25 fast
2 x 50 | 1-2
2 x 25 fast
50 (0)
3 x 25 fast



Tuesday & Thursday PM

20 x 50 → #0# fast
 → #1 EZ

18 x 50 → #1 Kick fast
 → #2 Drill
 → #3 Go!

4 x 50 fast @ 2:00
2 x 50 EZ
3 x 50 fast @ 2:00
2 x 50 EZ
2 x 50 fast @ 2:00
2 x 50 EZ
Dive 50


4x { Dive 25 fast @ 1:00
 3 x 25 fast @ :30
 100 4/3/2/1

Dive 4 x 100 @ 6:00/7:00

2x { 4 x 50 Dive @ 2:00
 2 @ 1:30 push
 2 @ 1:00 push

3x { Dive 100 @ 2:00
 50 (0) @ 1:30
 50 Go! @ 2:00

Dive 6 x 50 @ 4:00 (0)




Wednesday

Recovery

4K

- ✓ No Slop
- ✓ Lots of Toys
- ✓ Hypoxic Pull
- ✓ Drill Perfect
- ✓ Swim = Pretty
- ✓ Pull = Hold H²O



Friday

IM Focus


6 x 75 + 250 Free Got

#1 75 Fly
#2 75 50 Fly, 25 BK
#3 75 Back
#4 75 50 Back, 25 BR
#5 75 Breast
#6 75 50 Breast, 25 Free
#7 150 Free Got

6 x 150 + 100 Free Got

#1 Fly
#2 25 Fly, 25 Back
#3 Back
#4 25 Back, 25 Breast
#5 Breast
#6 25 Breast, 25 Free
#7 100 Free Got

2x {



Saturday

(1) Hour of Speed
with partner pull/tubing P.P. = 6 x 50
6 x 50 drill } X3

4 x 25 pull max
4 x 25 "blast"
4 x 25 (0) Dive
(E) (0)
300 skull, 75 d.p.s. wifins

