

RESIDUAL TRAINING EFFECTS

Adapted from: Issurin, V. (2008). "Block Periodization: Breakthrough in Sports Training."
New York, NY: Ultimate Athlete Concepts



MOTOR ABILITY

EFFECT RATE (DAYS)

PHYSIOLOGICAL BACKGROUND

AEROBIC ENDURANCE

30 (+/-5)

INCREASED NUMBER OF AEROBIC ENZYMES, MITOCHONDRIA, CAPILLARY DENSITY, HEMOGLOBIN CAPACITY, GLYCOGEN STORAGE, HIGHER RATE OF FAT METABOLISM

MAX STRENGTH

30 (+/-5)

IMPROVEMENT OF NEURAL MECHANISM, MUSCLE HYPERTROPHY

GLYCOLYTIC ENERGY
SYSTEM

18 (+/-4)

INCREASED ANAEROBIC ENZYMES, BUFFERING CAPACITY AND GLYCOGEN STORAGE, HIGHER POSSIBILITY OF LACTATE ACCUMULATION

REPEAT-POWER

18 (+/-4)

IMPROVED AEROBIC/ ANAEROBIC ENZYMES, IMPROVED LOCAL BLOOD CIRCULATION AND LACTATE TOLERANCE, REPEAT SPRINT ABILITY

ATP/CR-P

5 (+/-3)

ENHANCED RESYNTHESIS OF CR-P

SPEED

5 (+/-3)

IMPROVED NEUROMUSCULAR INTERACTIONS AND MOTOR CONTROL, INCREASES ANAEROBIC POWER

