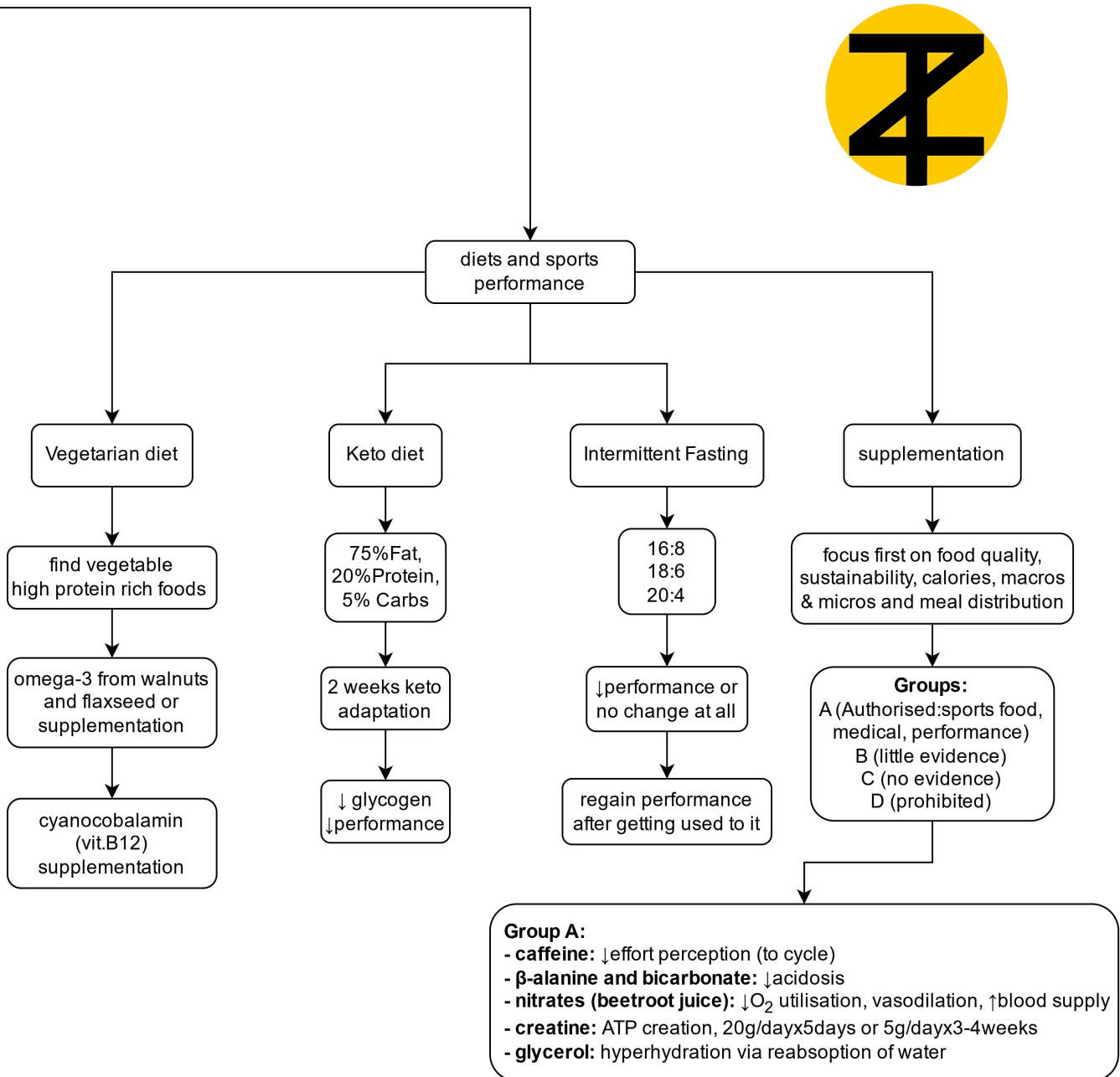




(Macro)nutrients distribution

Proteins

1,4 - 2,3 g/kg/day

Depends on: exercise volume, age, body composition, total calories, training and physical condition of the athlete

Fats

at least 20% of total calories of the day

3-4 hours away from training

not in the pre or intra-training

omega-3 help reduce inflammation → injury recovery

Carbs

importance of carbs

better performance in the majority of people

3-5 g/kg/day
5-7 g/kg/day
6-10 g/kg/day
8-12 g/kg/day

glycogen overcompensation (unloading and reloading)

pre-training

1-4 h before competition:
1-4 g/kg

↓G.I. if NO intra
↑G.I. if intra load

avoid ↑fibre food
1-2 days before

intra-training

< 30 min → unnecessary
1 hour → mouthwashes

combine glucose and fructose = ↑ absorption
= ↑ Insulin peak

mouthwashes: areas of the brain related to motor activity are activated.

post-training

4R Period:
- Restore glycogen
- Replace water & salts
- Reconstruct tissues
- Relaxation (rest)

1,2 g/kg of carbs + 0,4 g/kg of proteins = ↑ protein synthesis

Water

hydration

- before: clear urine 4 h before
- during: 0.5-0.7 L/h isotonic
- after: 150-200% lost weight
slightly hypertonic Na⁺ 1-1.2g/L

carbs, Na⁺ and K⁺ help intestinal water absorption

Ice Slurry 1h before competition
= ↓temperature ↓exhaustion

dehydration

Rhabdomyolysis:
muscle damage → release of contents into the bloodstream.

- Creatine phosphokinase (CPK)
- GOT and GPT
- Myoglobin



