




NUTRITION FOR MULTI-SPORT ATHLETES

Rachel A. Clark, MS, RD, CSSD
Sports Dietitian & Continuing Lecturer
Purdue University



MULTI-SPORT ATHLETES



Problem 1: INFLAMMATION

- High volume of physical activity
- Inadequate/poor sleep
- Stress
- Heat / humidity / cold
- Exposure to bacteria, viruses, allergens
- Poor food choices
 - *Excess saturated fat*
 - *Excess sugar*

Problem 1: INFLAMMATION

Effect on training/performance

- Immune system impairments
 - *missed/poor training days*
- Chronic disease:
 - *heart disease*
 - *hypertension*
 - *diabetes*
 - *cancer*
 - *depression*
 - *gut bacteria imbalances*
 - *Crohn's disease*
 - *psoriasis*



Problem 1: INFLAMMATION

Nutrition Solution: Anti-oxidants

- Minimum 2-3 cups veg + 1-2 cups fruit daily
 - *Add berries to cereal, oatmeal, smoothies, or yogurt*
 - *Keep dried fruit or GoGoSqueez in locker and the car*
 - *Add leafy greens to smoothies*
 - *Add chopped veggies and/or spinach to egg scrambles*
 - *Add veggies to sandwiches*
 - *Pack fruit and veggies in lunches*
 - *Roast veggies and add them to sauces, eggs, rice, pasta, eggs*
 - *Always include a vegetable at dinner*
 - *100% Fruit & Veggie juices*

Problem 1: INFLAMMATION

Nutrition Solution: Anti-oxidants

- Healthy oils, nuts, seeds every day
 - *Add chia seeds or flaxseed to oatmeal, smoothies, or yogurt*
 - *Top oatmeal or salads with nuts*
 - *Keep snack bag of nuts/seeds or trail mix in locker and car*
 - *Have nut butter on toast, in smoothies, oatmeal or sandwiches*
 - *Add avocado to salads or sandwiches*
 - *Use oil-based salad dressings (Italian, Vinaigrettes)*
 - *Eat fish or seafood 1-2 times/wk – especially fatty fish like salmon, tuna, trout, and herring*

Problem 2: DEHYDRATION

- High volume of physical activity
- No schedule/plan for fluid intake
- Poor/last-minute weight management approaches



Problem 2: DEHYDRATION

Effect on training/performance


- $\geq 1\%$ loss of body weight during training
 - *Decrements in speed, reaction time, accuracy, stamina*
 - *Loss of focus*
 - *Muscle cramps*
 - *Nausea*
 - *Dizziness*
 - *Weakness*
 - *Headache*
 - *Irritability*

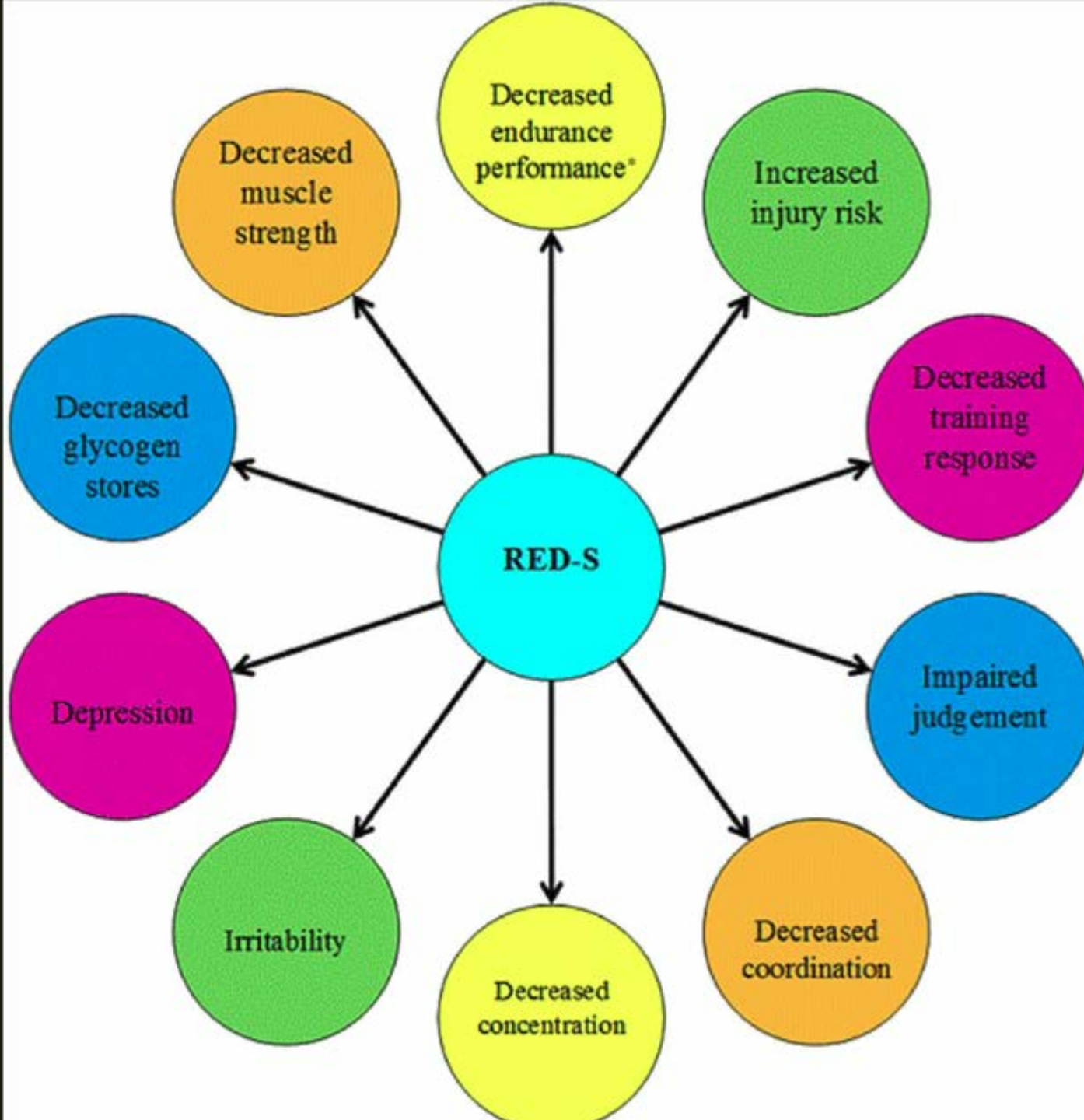
Problem 2: DEHYDRATION

Nutrition Solution: Fluids

- Drink a glass of water upon waking
- Emphasize fluids during/after training and between sessions
- Multiple water bottles in various locations
 - *Locker (school & gym)*
 - *Car*
 - *Bedroom*
 - *Backpack*
- Build fluid breaks into your practice plan
- Managers actively offering fluids during practice
- Water, milk, unsweet tea, 100% juices (sports drinks with training)
- Fruits, veg, soup, beans are also good sources

Problem 3: UNDERFUELING

- Eating gaps
- Multiple training sessions/day 
- High energy cost of multi-sport training
- Travel time
- Poor/last-minute weight management approaches



Relative Energy Deficiency in Sport

Problem 3:
UNDERFUELING
Effect on training
& performance

When athletes are underfueled during competition, fatigue kicks in and they lose _____, which can lead to injury.

- A) body fat
- B) protein stores
- C) bone density
- D) focus

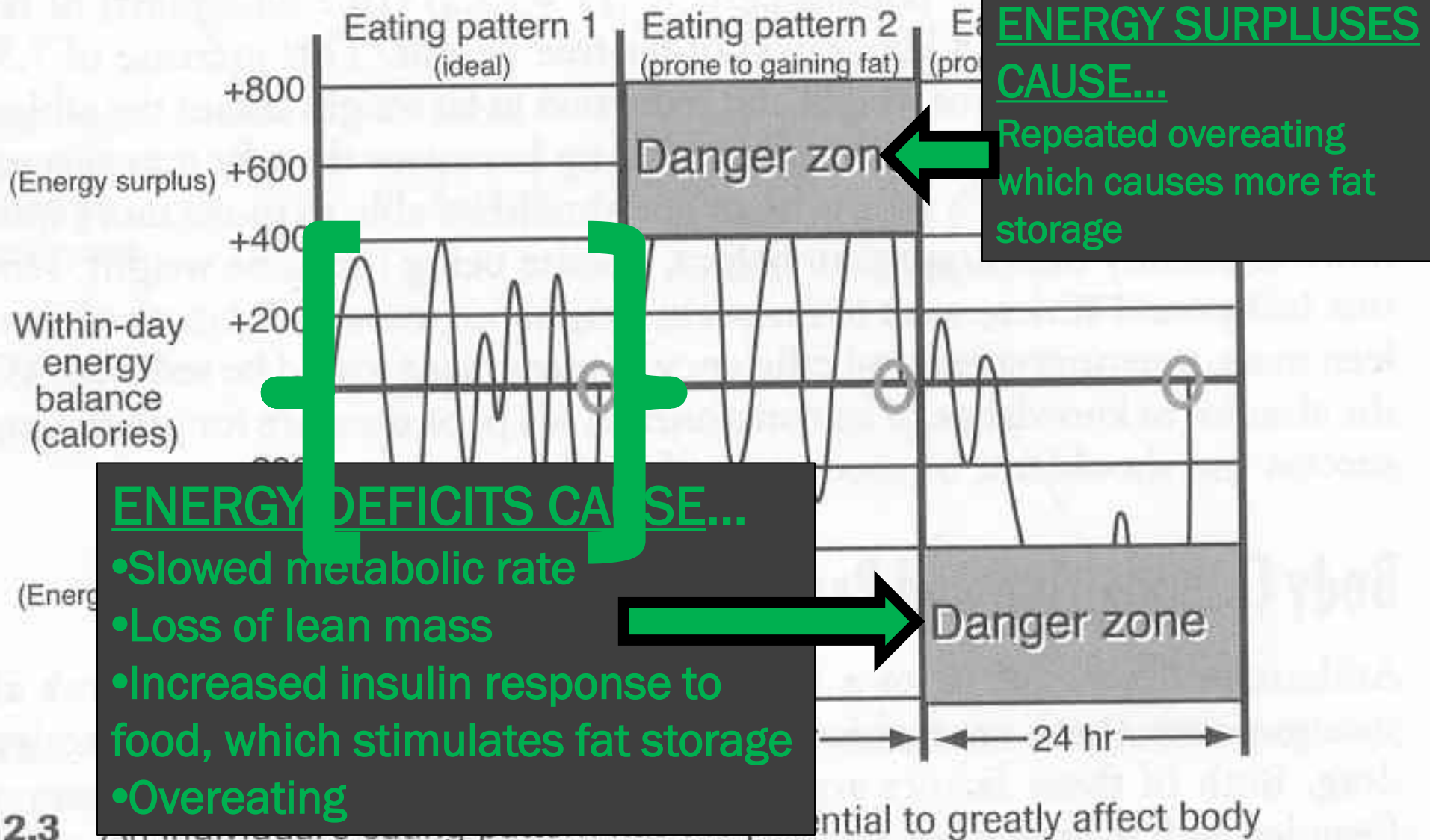


Figure 12.3
composition.

Problem 3: UNDERFUELING

Nutrition Solution: Nutrient-rich Calories

- Don't miss meals – eat every 2-4 hours
- Include at least 2-3 food groups at every eating occasion
- Keep shelf-stable foods stocked in locker, backpack and car
- Have nutritious foods ready-to-eat at home
- Pack foods with frozen water bottles
- Prep ahead
- Focus on liquids between activities (smoothies, juices)
- Choose calorie-dense cereals like granola
- Add nuts, seeds, cheese, avocado, olives as toppers

QUESTIONS?

Rachel A. Clark, MS, RD, CSSD

RachelClark@purdue.edu