Summer fun: Maintaining healthy behaviors when schedules change

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Summer fun: Maintaining healthy behaviors when schedules change

Erin K. Howie Hickey, PhD & Jamie I. Baum, PhD
DFEND Directors
Reminder: Attend the personalized coaching sessions!

• **Behavior change** coaching
  • Mondays 12:00 – 1:00 pm
  • Danielle Higuera

• **Nutrition** coaching
  • Tuesdays 12:00 – 1:00 pm
  • Jamie McDermott, MS, RDN/LD

• **Physical activity and exercise** coaching
  • Thursdays 12:00 – 1:00 pm
  • Bryce Daniels
WEEK #18 CHALLENGE

Try to get 7-8 hours of sleep each day! Comment on the Facebook challenge post how the challenge goes or email it to dfend@uada.edu or dfend.uofa@gmail.com
This week’s demos

• Check our YouTube channel for demos - https://www.youtube.com/channel/UC1COt-uvHEf5XZhwLswYkXw/featured

• Check out our website for Fast Facts - https://aaes.uark.edu/centers-and-programs/nutrition/dfend-3/

• Challenge: Get 7-8 hours of sleep each night

• Cooking demo: Foods for sleep

• Physical Activity: Safe exercises in the heat
Summer fun: Maintaining healthy behaviors when schedules change
Summer Time!
8 healthy tips for summer dining

• Our dining habits change with summer – we eat out more and attend more celebrations and events.

• Tips for staying healthy:
  • Use portion control
  • Make a healthy plate
  • Read labels
  • Dine and shop smart
  • Skip the salt, cut the fat
  • Be cautious of fad diets
  • Snack smart
  • Hydrate
Stay hydrated!

• Drink water – and plenty of it!
• Know the signs of dehydration
  • Dry, irritated, inflamed, itchy or sensitive skin
  • Headache, dizziness, fatigue
• Check your urine
  • Darker urine is a sign you need more water
• Avoid alcohol, sugary drinks, and/or caffeine
• Keep cool
• Eat foods with high water content
• Replenish when you sweat

Foods with high water content

• Cucumbers
• Celery
• Iceberg lettuce
• Zucchini
• Watermelon
• Strawberries
• Cauliflower
• Radishes
• Carrots

Tips to prevent foodborne illness at summer BBQs

• Wash hands
• Keep raw food separate from cooked food
• Marinate food in the refrigerator, not on the counter
• Cook food to proper temperature
  • Beef – 160 degrees F
  • Chicken – at least 165 degrees F
• Keep hot food hot
• Keep cold food cold
• Once you’ve served your food, it should not sit out more than 2 hours (1 hour if the temp is above 90 degrees F)
• If food is left out longer, throw it away to be safe

https://www.fda.gov/consumers/consumer-updates/barbecue-basics-tips-prevent-foodborne-illness

https://www.cdc.gov/foodsafety/keep-food-safe.html
Summer physical activities
Energy cost of summer activities

* Based on 150 lb person doing the activity for 30 minutes

<table>
<thead>
<tr>
<th>Activity</th>
<th>METs</th>
<th>Calories*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fishing from boat or canoe</td>
<td>2.0</td>
<td>72</td>
</tr>
<tr>
<td>Fishing in stream in waders</td>
<td>6.0</td>
<td>215</td>
</tr>
<tr>
<td>Mowing lawn ride on</td>
<td>2.5</td>
<td>89</td>
</tr>
<tr>
<td>Mowing lawn walk power mower</td>
<td>5.0</td>
<td>179</td>
</tr>
<tr>
<td>Weeding garden (light effort)</td>
<td>3.5</td>
<td>125</td>
</tr>
<tr>
<td>Canoeing (moderate effort)</td>
<td>5.8</td>
<td>208</td>
</tr>
<tr>
<td>Paddle boat</td>
<td>4.0</td>
<td>143</td>
</tr>
<tr>
<td>Water skiing or wake boarding</td>
<td>6.0</td>
<td>215</td>
</tr>
<tr>
<td>Swimming breast stroke recreational</td>
<td>5.3</td>
<td>190</td>
</tr>
<tr>
<td>Swimming butterfly</td>
<td>13.8</td>
<td>494</td>
</tr>
<tr>
<td>Water jogging</td>
<td>9.8</td>
<td>351</td>
</tr>
</tbody>
</table>

How to calculate calories

• Calories = weight in lbs / 2.2 * METs * 3.5 / 200 * minutes

Reminder:
• Moderate activity = 3-6 METs
• Vigorous activity = 6+ METs
• Goal = 150 minutes of moderate or 75 minutes of vigorous a week

[https://sites.google.com/site/compendiumofphysicalactivities/home](https://sites.google.com/site/compendiumofphysicalactivities/home)
Get outside (but be smart!)

- Heat
- Dehydration
- UV
- Critters

What tips do you have?

- Set reasonable goals
- Adjust your workout times
- Stay hydrated before, during and after your workout.
- Know the warning signs of heat exhaustion and heat stroke.
- Consider exercising with a workout buddy to monitor each others’ physical states.
- Before exercising, take some time to acclimate to the heat.
- Workout in lightweight exercise attire
- On hot days, consider working out in cooler locations.
- Wearing sunscreen is always a must, but prioritize using formulas made to withstand sports.
- Check your urine, as the color is an indication of hydration levels.
- Do not take medications that can intensify symptoms of heat exhaustion. Both caffeine and alcohol can accelerate the effects of dehydration.

https://www.army.mil/article/238680/summer_tips_for_safe_outdoor_exercise
Heat

• For more info on this topic and other environmental consideration: Check our Dr McDermott’s DFEND presentation
<table>
<thead>
<tr>
<th>Disorder</th>
<th>Prominent Signs and Symptoms</th>
<th>Mental Status Changes</th>
<th>Core Temperature Elevation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exertional heatstroke</td>
<td>Disorientation, dizziness, irrational behavior, apathy, headache, nausea, vomiting, hyperventilation, wet skin</td>
<td>Marked (disoriented, unresponsive)</td>
<td>Marked (&gt;40° C)</td>
</tr>
<tr>
<td>Exertional heat</td>
<td>Low blood pressure, elevated heart rate and respiratory rates, skin is wet and pale, headache, exhaustion</td>
<td>Little or none, agitated</td>
<td>None to moderate (37° to 40° C)</td>
</tr>
<tr>
<td>Heat syncope</td>
<td>Heart rate and breathing rates are slow; skin is pale; patient may experience sensations of weakness, tunnel vision, vertigo, or nausea before syncope</td>
<td>Brief fainting episode</td>
<td>Little or none</td>
</tr>
<tr>
<td>Exertional heat</td>
<td>Begins as feeble, localized, wandering spasms that may progress to debilitating cramps</td>
<td>None</td>
<td>Moderate (37° to 40° C)</td>
</tr>
<tr>
<td>cramps</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Temperature Homeostasis

**Figure 12.1** During steady-state conditions, temperature homeostasis is maintained by an equal rate of body heat gain and heat loss.
Heat Exchange

Sky thermal radiation

Evaporation (sweat)

Skin blood convection

Metabolic storage

Contracting muscle

Conduction

Body core

Evaporation (respiratory)

Convection

Radiation

Muscle blood flow convection

Work

Air temperature

Air humidity

Solar radiation

Ground thermal radiation

Reflected solar radiation

Running speed
FIGURE 8.2. W stands for "weight." U stands for "urine." T stands for "thirst." When two or more simple markers are present, dehydration is likely. If all three markers are present, dehydration is very likely. Reprinted with permission from (26).
QuickStats: Number of Heat-Related Deaths,* by Sex — National Vital Statistics System, United States,† 1999-2010s

* Deaths attributed to exposure to natural heat, as the underlying and contributing causes of death, are coded as X30 and T67, according to the International Classification of Diseases, 10th Revision.
Wear appropriate clothing

• Uniforms create a microenvironment, trapping heat near the skin.
Drink water

• Dehydration leads to higher temperatures
# Fluid Replacement Recommendations before, during, and after Exercise

<table>
<thead>
<tr>
<th>Fluid</th>
<th>Comments</th>
</tr>
</thead>
</table>
| **Before exercise** | • Drink 5–7 mL · kg⁻¹ (0.08–0.11 oz · lb⁻¹) at least 4 h before exercise (12–17 oz for 154-lb individual).  
• If urine is not produced or very dark, drink another 3–5 mL · kg⁻¹ (0.05–0.08 oz · lb⁻¹) 2 h before exercise.  
• Sodium-containing beverages or slated snacks will help retain fluid. |
| **During exercise** | • Monitor individual body weight changes during exercise to estimate sweat loss.  
• Composition of fluid should include 20–30 mEq · L⁻¹ of sodium, 2–5 mEq · L⁻¹ of potassium, and 5%–10% of carbohydrate.  
• Prevent a >2% loss in body weight.  
• Amount and rate of fluid replacement depends on individual sweating rate, environment, and exercise duration. |
| **After exercise** | • Consumption of normal meals and beverages will restore euhydration.  
• If rapid recovery is needed, drink 1.5 L · kg⁻¹ (23 oz · lb⁻¹) of body weight lost.  
• Goal is to fully replace fluid and electrolyte deficits.  
• Consuming sodium will help recovery by stimulating thirst and fluid retention. |
Next week: FINAL DFEND 3 SESSION

- Open discussion
- Wrap-up
- Goal check-in
- DFEND series feedback