



Kernels

Vol. 23

SUMMER 2018

5 Tips for the Perfect Picnic

Carbohydrates, Performance, & Weight Loss:

*Is Low the Way to go,
or the Way to Bonk?*

The Next Food Craze: Playing with Pancakes

PLUS:

*Summertime Recipes:
Keeping it Light*





Message from the *President*

In this issue we address the topic of most confusion—the role of carbohydrates in performance and weight loss. Fad diets and some training trends promote low carbohydrate intake; we offer through our experts what the science and athletic results say. You will also find some fun recipes, a new twist on pancakes and picnic tips. Please feel free to use all of this information with your clients.

Tim O'Connor
President, Wheat Foods Council





Carbohydrates, Performance, and Weight Loss:

IS LOW THE WAY TO GO, OR THE WAY TO BONK?

By: Glenn Gaesser, PhD

- Despite their popularity, meta-analyses demonstrate that low-carbohydrate diets are no more effective for weight loss than low-fat or balanced diets.
- Carbohydrates are essential for high-intensity exercise because the maximum rate of energy production is substantially higher for carbohydrates compared to fats. Low-carbohydrate diets reduce tolerance for very high-intensity exercise.
- Training under low-carbohydrate conditions may enhance skeletal muscle adaptations, but no study has shown that this type of training results in superior endurance performance.
- The fact that world's best marathoners consume relatively high carbohydrate diets is testament to the superiority of carbohydrates as a fuel for competitive endurance sports.

Carbohydrates Are Essential For High-Intensity Exercise

- During exercise the percentage of total energy production that is derived from carbohydrate increases as exercise intensity increases, until carbohydrate contributes essentially 100% of the total energy production.
- The maximal rate of energy production from carbohydrate is much higher than that of fat.
- Energy production at or near $\text{VO}_{2\text{max}}$ can only be supplied by carbohydrates.
- Carbohydrates are the preferred fuel during high-intensity exercise, and are absolutely essential for exercise at maximal, or near-maximal intensities.
- Low-carbohydrate diets, on the other hand, adversely affect exercise performance.



*“Train Low, Race High”:
Training on a
Low-Carbohydrate Diet,
Racing on a High-
Carbohydrate Diet*

Recent published data suggests that endurance athletes may be able to enhance their performance potential by training under conditions of low carbohydrate availability (i.e., “train low”), but race under conditions of high carbohydrate availability (i.e., “race high”)



Practical Applications

These are some strategies that may be used to optimize potential benefits of a “train low” strategy without negatively impacting training:

- An athlete can train under fasting conditions, perhaps either in the morning before eating, or by having two training sessions per day, with the second one occurring without replenishment of carbohydrates after the first training session.
- The athlete can also make sure that the training sessions under low-carbohydrate conditions are not intense.
- The training schedule should include sessions of training “high” that simulate a competition fueling schedule.

Carbohydrate Requirements for Exercise and Recovery

Daily dietary carbohydrate intake requirements vary depending on the training intensities and durations. Intake recommendations during the race are not based on body weight because the carbohydrate oxidation rate of exogenously supplied carbohydrate is not correlated with body weight.

To view complete article with all references and notes, go to:
<http://www.wheatfoods.org/sites/default/files/attachments/carbohydrates-performance-and-weight-loss-low-way-go-or-way-bo.pdf>

Summertime Recipes: Keeping it Light



COVER RECIPE

INGREDIENTS:

1 -18 ounce package refrigerated sugar cookie dough
4 ounces cream cheese (1/3 less fat), softened
2 tablespoons sugar
1 -11 ounce can mandarin oranges, drained

6 large fresh strawberries, sliced in half
2 medium kiwis, peeled and sliced
1/4 cup blueberries, blackberries or raspberries
OR fruit of your choice

DIRECTIONS:

Roll cookie dough evenly on a 15-inch pizza pan, coated with non-stick spray. Leave approximately 1" around the pan uncovered as dough will spread in baking. Crimp outer edges of dough. Bake 12 to 15 minutes at 350 degrees F. until edges begin to brown. Do NOT over-bake. Set aside to cool.

Beat cream cheese with sugar until smooth. Spread evenly over cooled crust. Top with fruit and serve.

Must be refrigerated.

SERVINGS: 12 servings (generous-sized pieces)

NUTRITION: One serving provides approximately: 240 calories, 3 g protein, 33 g carbohydrates, 1 g fiber, 11 g fat (3.5 g saturated), 25 mg cholesterol, 5 mcg folate, .6 g iron, 160 mg sodium.



Turkey & Veggie Wrap

INGREDIENTS:

2 - 8-inch whole wheat tortillas, lavosh, or chapatis
 1/2 cup low fat, herb-flavored cream cheese OR
 1/2 cup Boursin cheese
 8 ounces turkey, thinly sliced
 1 medium carrot, peeled and grated
 1 cup watercress, arugula or Romaine lettuce

DIRECTIONS:

Spread cheese evenly over the tortillas. Lay the turkey slices on top of the cheese and sprinkle with carrots and watercress. Roll up the bread tightly to create a log shape. Wrap tightly in plastic wrap and refrigerate for up to 12 hours. Just before serving, slice each log in half at a slight diagonal.

SERVINGS: 4

CALORIES/SERVING: 209

NUTRITION: One serving provides approximately (using cream cheese and lettuce): 16 g protein, 18 g carbohydrate, 1 g fiber, 8 g fat (4 g saturated), 39 mg cholesterol, 30 mcg folate, 2 mg iron, 756 mg sodium.

INGREDIENTS:

1 (13.25 ounce) box whole-wheat penne (or other shape) pasta
 4 medium tomatoes, chopped or 1 pound grape tomatoes, halved
 1/2 pound fresh low-fat, mozzarella cheese, in 1/2" cubes or fresh mozzarella "pearls"
 1/3 cup chopped fresh sweet basil
 1/4 cup olive oil
 1 tablespoon Italian seasoning
 1 tablespoon balsamic vinegar
 1/2 teaspoon salt (optional)

DIRECTIONS:

Cook pasta according to package directions. Rinse with cold water and drain. Add tomatoes, cheese and sweet basil.

In a separate small bowl, combine oil, seasoning, vinegar and salt (if using). Add to pasta mixture and chill.

SERVINGS: 10

CALORIES/SERVING: 266

NUTRITION: One serving provides approximately: 9 g Protein, 31 g Carbohydrates, 4 g Fiber, 12 g Fat (4 g saturated), 18 mg Cholesterol, 1 mcg Folate, 1 mg Iron, 22 mg Sodium

Caprese Pasta Salad



The Next Food Craze: Playing with Pancakes

Making the Traditional Uniquely Different





“Pancakes are the next fetish carb,” according to Eater.com special correspondent, Meghan McCarron. What does that mean exactly?

“A food fetish is not like a trend; it’s an everyday indulgence, all “gussied up,” said Kara Nielsen, VP of Trends & Marketing, CCD Innovation. “It’s considered a splurge to indulge and create distinctive and unique pancakes. Load them up with fruit, chocolate, nuts, any variation of toppings and have fun.”

Pancakes are the perfect grain-based vehicle to play with and get creative. With the evolution of consumers’ varied dining patterns, departure from traditional mealtimes, and Millennials’ love of brunch, pancakes are not just served in the morning anymore.

All Day Breakfast has inspired new menu trends that appeal throughout the day, according to Packaged Facts’ **new breakfast trends report** . Consumers have turned their flair for food innovation and desire for the latest culinary experience to biscuits, donuts, and now pancakes.

“Pancakes have become an indulgent format where layers of flavors are added to express each individual’s taste,” added Ms. Nielsen. “You can’t just have traditional pancakes when it’s not breakfast time - it has to be something special.”

Enter the spirit-infused, like **Prosecco Pancakes** or **Gin and Tonic Pancakes**; or the ethnically-inspired, thick and fluffy **Japanese-style pancakes**.



These are extremely light in texture - think soufflé. Egg whites and mayonnaise are added to the traditional pancake recipe.

Varied dayparts have increased the popularity of savory pancakes as alternatives to uniquely sweet. The different taste spectrums are driven by the time of day served. **Dutch baby pancakes**, also known as German pancakes, are like popovers with an eggy texture. They are made with eggs, milk, flour, and butter, and savory recipes are usually combined with cheeses, herbs, vegetables, and spices.

With the continued appeal of increased protein in foods, it is no surprise protein pancakes remain popular. Pancake recipes already contain eggs which are a great protein source. Other natural protein-fortified ingredients include: high-protein flour, whole wheat flour, Greek yogurt (which adds fluffiness), nuts and nut butters, beans and pulses. Turmeric, which a hot, health trend, is a spice similar to ginger, so **NewYorkStreetFood.com** suggests adding it to fall favorites, like pancakes with pumpkin, carrot or apple, adding ½ teaspoon to the batter to start. Try these **Light-as-a-Feather Whole Wheat Pancakes**, **Blueberry Greek Yogurt Pancakes**, or **Pumpkin Protein Pancakes**.

Pancakes are meant to be shared, and they are fun to photograph! This combination makes for tantalizing social media posts to share, taste and enjoy.





5 Tips for the Perfect Picnic



1. Make it Simple

Ensure all picnic foods are simple to transport and not too heavy to carry. Some picnic spots are isolated with a long walk to reach them. Opt for paper or plastic plates and cutlery: also easier to carry.

2. Make it Interesting

Make picnic food interesting and easy to eat – think finger food. Salad in boxes takes up much room, instead stuff pitta bread with goat's cheese and handfuls of salad – two in one.

3. Forget About Courses

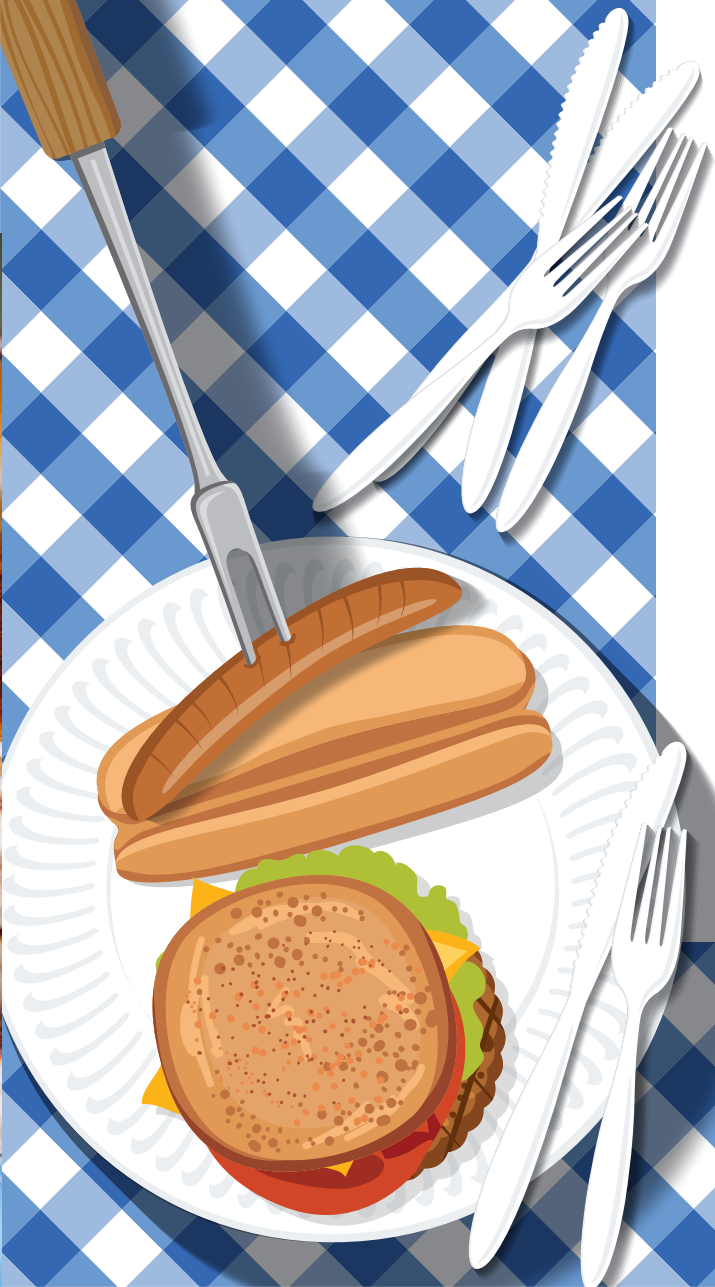
The fun of a picnic is to spread all the food on the blanket and let everyone laze around, helping themselves. Multiple courses not necessary!

4. Keep it Cool

Use cool bags or a cooler. Picnic baskets look nice but are often too heavy to carry. Plus cool box/bags will keep food at the correct temperature.

5. Things to Avoid

Avoid ice cream, sticky puddings, and cakes – they are fragile to transport and wasps and other insects love them.



Wheat Foods Council's Summer Meeting Recap

This year, we held our summer meeting at the Wheat Marketing Center in Portland, OR. The event included a tour of the Wheat Marketing Center hosted by Janice Cooper, Managing Director and presentations by Kim Harper, Quality Assurance Specialist, Federal Grain Inspection Service/ USDA and Steve Wirsching, VP and Director of the U.S. Wheat Associates West Coast Office. We finished up with a tour of Ardent Mill's Innovative Bakery facility. Thursday's meeting included the installation of new officers: Chair Vance Taylor, North Dakota Mill; Vice Chair Rachael Vonderhaar, Ohio Corn & Wheat; and Treasurer/Secretary Hayden Wands, Bimbo Bakeries. The WFC 2019 Annual Meeting will be held January 15-17, 2019 in New Orleans, LA.



Interested in Becoming a Member?

The Wheat Foods Council is always looking for committed organizations with an interest in promoting wheat foods to become members. For more information on the different types of membership, visit:

<http://wheatfoods.org/content/members>