



Fueling for Health: The Basics of Nutrition

"Boy, I'm really sleepy from eating all those vegetables."
--Said no-one ever



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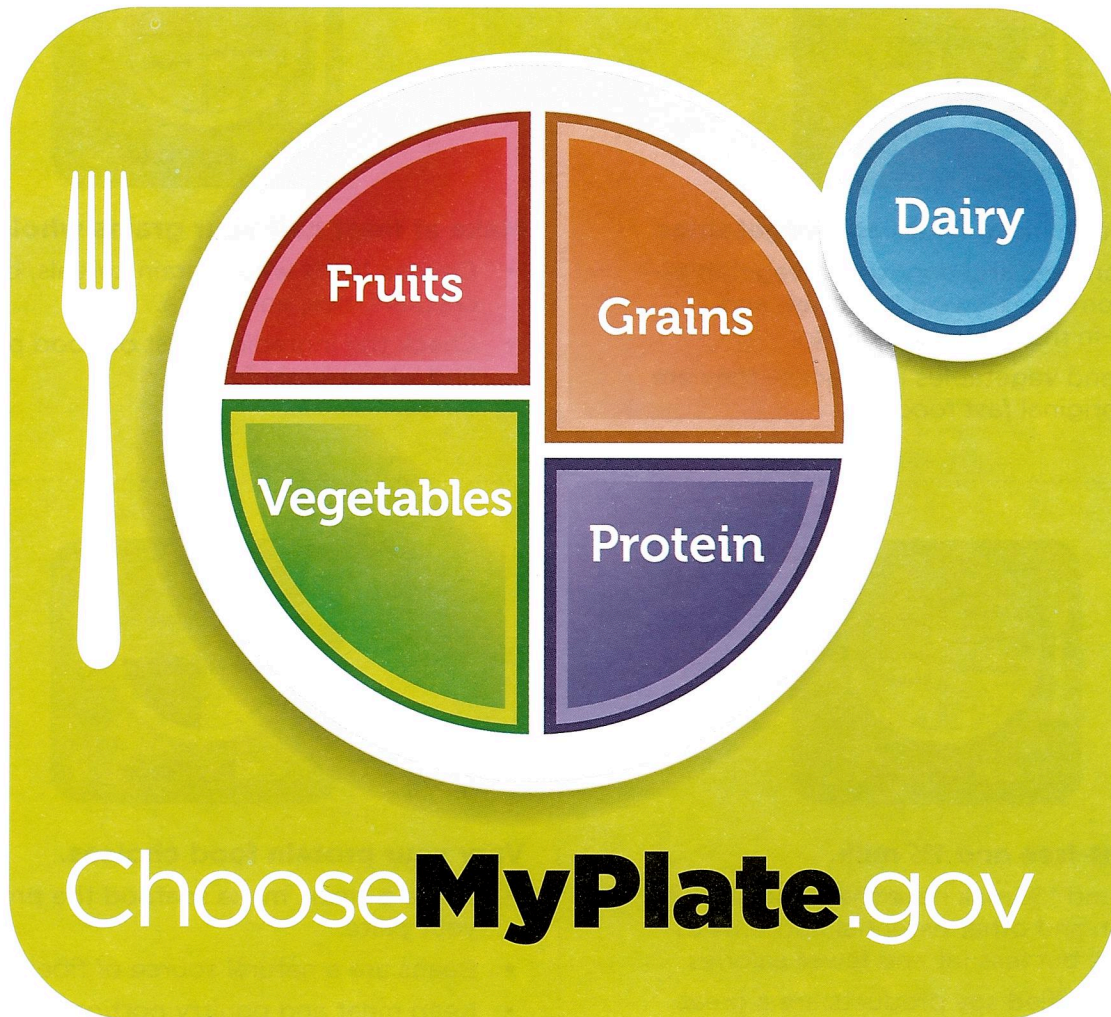
Fueling for Recovery

SMART Goals

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MyPlate



U.S. Department of Agriculture

Vegetables—Vary your veggies.

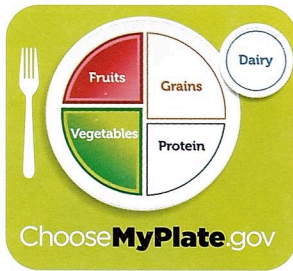
Fruits—Focus on fruits.

Grains—Make at least half your grains whole.

Dairy—Get your calcium-rich foods.

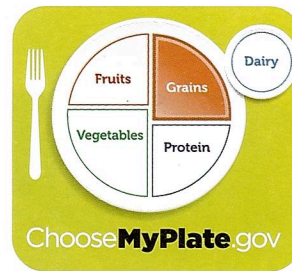
Protein Foods—Go lean with protein.

MyPlate Nutrition Tips



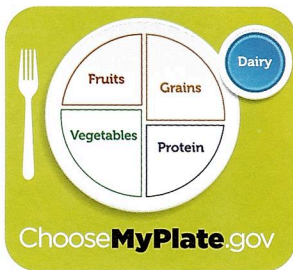
Make half your plate fruits and vegetables.

- Eat red, orange, and dark-green vegetables—such as tomatoes, sweet potatoes, and broccoli—in main and side dishes.
- Eat fruit and vegetables as snacks—they are nature's original fast foods.



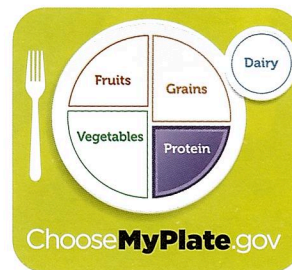
Make at least half your grains whole.

- Choose 100% whole-grain cereals, breads, crackers, rice, and pasta.
- Check the ingredients list on food packages to find whole-grain foods.



Switch to fat-free and 1% milk.

- Fat-free and 1 % milk have the same amount of calcium and other essential nutrients as whole milk but less fat and fewer calories.
- Calcium-fortified soy products are a great alternative to dairy foods.



Vary your protein food choices.

- Twice a week, make seafood the protein on your plate.
- Beans are a natural source of fiber and protein.
- Keep meat and poultry portions small and lean.

Cut back on foods high in solid fats, added sugars, and salt.

- Drink water instead of sugary drinks.
- Select fruit for dessert. Eat sugary desserts less often.
- Add spices or herbs to season food without adding salt.
- Make major sources of saturated fats—such as cakes, cookies, ice cream, pizza, cheese, sausages, and hot dogs—occasional choices, not everyday foods.

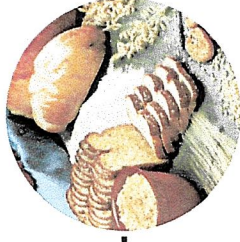
Eat the right amount of calories for you.

- Get your personal daily calorie limit at www.ChooseMyPlate.gov and keep that number in mind when you are deciding what to eat.
- Choose smaller portions.

Be physically active your way.

- Pick activities that you like and start by doing what you can, at least 10 minutes at a time.
- Every bit adds up, and the health benefits increase as you spend more time being active.

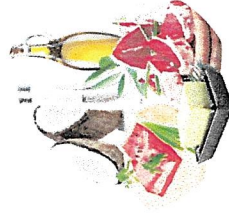
Daily Energy Needs



CARBS
45-65%



PROTEINS
10-25%



FATS
20-35%



THE BIG THREE: CARBOHYDRATE, PROTEIN, FAT

Grains: “Come Back to Earth” • Carbohydrate = FUEL for the brain & muscles

- Main sources are: Breads, cereals, grains, beans, fruits, and vegetables.
- What to look for in a grain: The least processed forms of grain you can find.
- Think brown and found close to the ground!
- The best choices will have more than 3g of FIBER per serving.

The Top 5 Grains



Oatmeal



Brown Rice



High Fiber Cereal



Quinoa



100% Whole
Wheat Bread



1 Serving Size
= Your Fist

Protein: “The Less Legs the Better” • Protein = Building blocks for our bodies

- Protein builds muscle and maintains the immune system.
- Main sources are: Lean Meats, Low Fat Dairy, Eggs, and Beans/Legumes.
- What to look for: Lean protein sources. Typically the less legs on the animal the protein came from, the better it is for you.
- Try to include a lean protein source with every meal.
- Protein needs increase with activity. Intake ranges from 0.5g (recreational exerciser) to 0.8g (building muscle mass) of protein per pound of body weight. You will never need more than 1g per pound for health or muscle mass gains. The palm of your hand equals about 30-40g of protein.

The Top 5 Proteins



Tuna/Fish



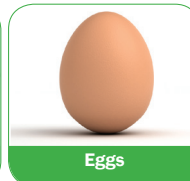
Chicken/Turkey Breast



Lean Red Meat



Low Fat Dairy



Eggs



1 Serving Size
= The Palm of Your Hand

Fats: “Eat Healthy Fat “ • Healthy Fats = Energy Density

- Healthy Fats provide energy, help to regulate blood sugar, improve cholesterol, and keep you feeling full.
- Omega-3 fatty acids improve cognition, decrease inflammation, and enhance heart health. They are considered essential because your body cannot make them, you must get them through food. Omega-3's are found in fatty fish like salmon, trout, and tuna, as well as flaxseed, walnuts, and omega-3 fortified foods.
- Try to get one serving of healthy fat per meal (2 total servings of fatty fish per week).

The Top 5 Fats



Nut Butter



Oils: Fish, Flax, Olive



Flax Seed Products



Avocado



Pecans, Walnuts
& Almonds



1 Serving Size
= The Tip of Your Thumb

Portions¹³

The key is many SMALL portions



1 serving of meat, poultry or fish = 3 oz.



1 serving of rice or pasta = $\frac{1}{2}$ C



1 serving of cereal = 1 C



1 serving of cheese = $1\frac{1}{2}$ oz.



1 serving of vegetables = $\frac{1}{2}$ C
or 1 C leafy greens



1 serving of fruit = 1 C fresh,
 $\frac{1}{2}$ C cooked/canned or 1
medium-sized piece

Tips to stay on track:

- Use a smaller plate.
- Weigh portions on a scale.
- Check Nutrition Facts label for serving sizes.
- Measure the amounts bowls, glasses, cups and plates hold.

Portion Sizes



3 ounces of meat

is about the size of a
deck of cards



A medium apple

is about the size of a
tennis ball



1 serving of cheese

is about the size of
6 dice



1 serving of butter

is about the size of a
postage stamp



1/2 cup of ice cream

is about the size of a
tennis ball



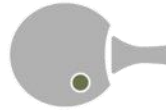
1 cup of broccoli

is about the size of a
baseball



2 tbsp of peanut butter

is about the size of a
ping pong ball



1/2 cup of pasta

is about the size of a
tennis ball



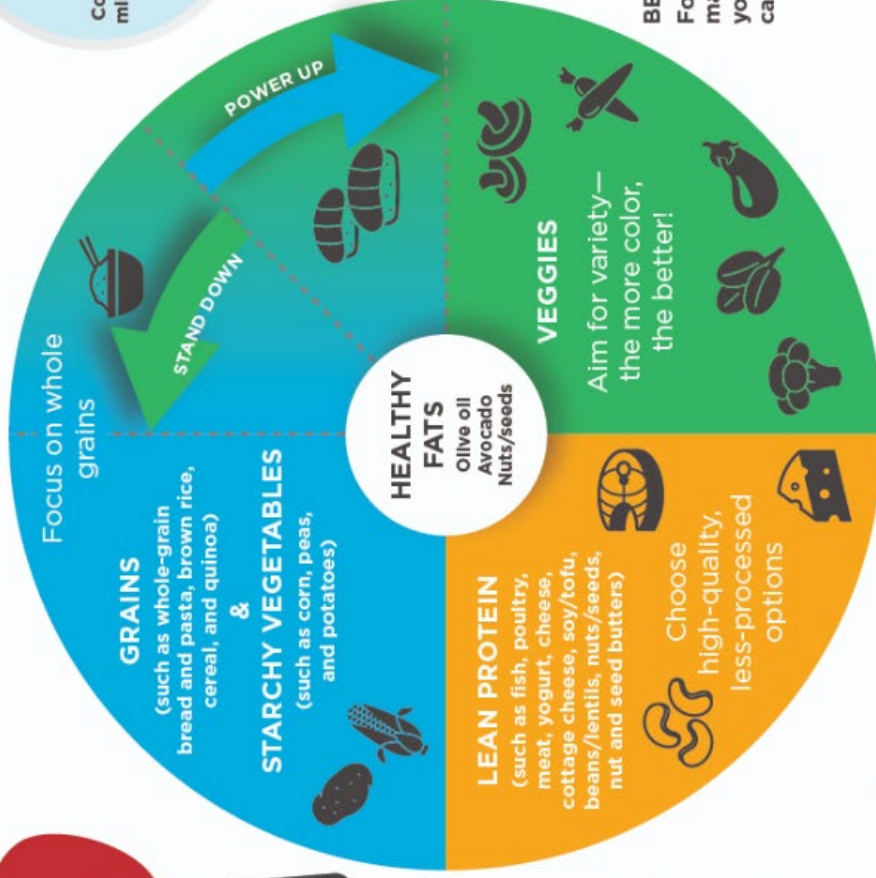
POWER PLATE

EAT TO FUEL YOUR PERFORMANCE



EAT MINDFULLY

- Slow down
- Take smaller bites
- Chew more
- Focus on flavor



BE ACTIVE!

For optimal performance, match your portions with your activity level (this can change day to day)



Adapted from:
Team USA's Athlete's Plates
For more information, visit
HPRC-online.org/nutrition



HUMAN PERFORMANCE RESOURCES by CHAMP | HPRC-online.org



Fueling for Performance

Proper fueling is all about getting the right nutrients at the right time to maximize your training results. Nutrient timing before, during, and after workouts helps you perform at your best and makes a difference in how prepared you will be for your next mission.

DID YOU KNOW?



- Fueling before you exercise protects muscle tissue and increases energy levels during physical training. Research has shown that fueling before training improves overall performance by 25–50%.
- Being dehydrated can decrease performance by almost 30%. Hydrating before, during and after your workout can guarantee a great training session and will keep you from falling out.
- By fueling immediately after exercise, you can increase your muscles' energy stores and improve recovery by 50%.
- Eating fruits and vegetables can help with fluid replacement. Foods such as watermelon, grapes, celery and cucumbers are great for rehydration!



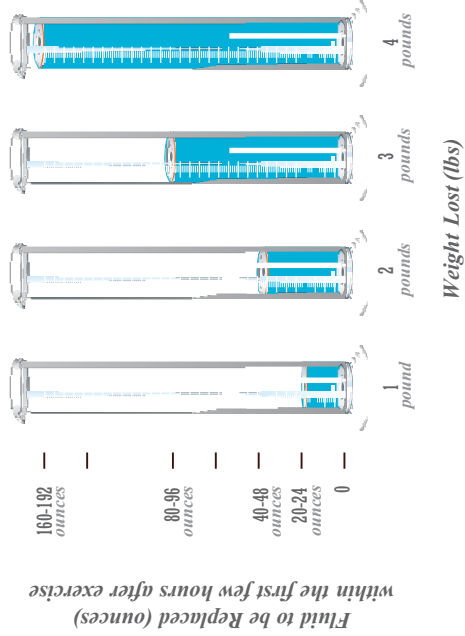
*Optimal
Fueling
Your body is like a
high performance
vehicle. It needs to be filled
with high quality fuel and the
right fluids to get maxi-
mum performance.*



In order to fully rehydrate after exercise and replace fluids lost:

- 1) Weigh yourself before and after exercise.
- 2) Calculate body weight lost in lbs.
- 3) Drink (or eat fruit) to replace fluid losses. Check out the Fluid Replacement Guidelines below.

Fluid Replacement Guidelines



Start strong, stay strong, finish strong!

Plan your meals like you plan your workouts! Strategies for eating and hydrating before, during, and after physical training are essential.



START STRONG

Top off fluids and put fuel in your tank before you go!

Eating a small meal or snack and being well-hydrated before physical training:

- Maximizes performance
- Protects muscle tissue
- Increases endurance
- Helps control appetite



STAY STRONG

Replenish fluids and refill as needed.



FLUIDS + FUEL

Staying well-hydrated during exercise:

- Maximizes performance
- Reduces the risk for injury
- Maintains energy levels
- Sustains performance
- Protects muscle tissue
- Improves recovery



FINISH STRONG

Finish by refilling your tank and fluids.

The best way to end a workout and prepare for the next is to replace fluid loss and fuel shortly after training. Refueling with a 4:1 ratio of carbohydrates to protein and replacing fluid loss 30–60 minutes after exercise:

- Protects muscle tissue
- Improves energy levels after training
- Controls appetite

TARGETS



Expert: Weigh yourself before and after your workout sessions this week to determine your fluid needs.



Sharpshooter: **Recover right!** Refuel 30–60 minutes after strenuous exercise sessions this week.



Marksman: Eat a **power** snack before strenuous exercise sessions this week.

Your optimal power snack choice will depend on how soon you will be training.

START STRONG

WHEN FUELING 2–4 HOURS BEFORE EXERCISE, TRY:
peanut butter and jelly sandwich + low-fat milk + water
deli sandwich + orange + water
pasta, chicken + small salad + water
yogurt, low-fat granola + berries + water

POWER SNACK

WHEN FUELING 1–2 HOURS BEFORE EXERCISE, TRY:
peanut butter and banana + water
yogurt and berries + water
½ turkey sandwich and apple + water
granola bar + low-fat milk + water

STAY STRONG

WHEN FUELING LESS THAN 1 HOUR BEFORE EXERCISE, TRY:
banana, yogurt
16 oz. sports drink
small granola bar + water

Always stay hydrated during your training sessions and fuel during longer training sessions.

STAY STRONG

WHEN TRAINING MORE THAN 1 HOUR, TRY:
banana + water
energy gel + water
12 oz. sports drink + water

STAY STRONG

WHEN TRAINING LESS THAN 1 HOUR, TRY:
water

Recovery starts immediately after you finish training. Recover right by drinking fluids immediately after training, followed by a meal or snack and additional fluids within 30–60 minutes.

FINISH STRONG

FOR RECOVERY SNACKS TRY:
hard boiled egg + banana + 12 oz. sports drink
12 oz. chocolate milk (dairy or soy)
graham crackers + banana + yogurt + water

FINISH STRONG

FOR RECOVERY MEALS TRY:
oatmeal + banana + hard boiled egg + low-fat milk + water
rice or pasta + fish + orange + steamed vegetables + water
whole grain turkey sub w/vegetables + grapes + water



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MyPlate MyWins

Based on the
Dietary
Guidelines
for Americans

Choose MyPlate

Use MyPlate to build your healthy eating style and maintain it for a lifetime. Choose foods and beverages from each MyPlate food group. Make sure your choices are limited in sodium, saturated fat, and added sugars. Start with small changes to make healthier choices you can enjoy.

1 Find your healthy eating style

Creating a healthy style means regularly eating a variety of foods to get the nutrients and calories you need. MyPlate's tips help you create your own healthy eating solutions—"MyWins."

2 Make half your plate fruits and vegetables

Eating colorful fruits and vegetables is important because they provide vitamins and minerals and most are low in calories.

3 Focus on whole fruits

Choose whole fruits—fresh, frozen, dried, or canned in 100% juice. Enjoy fruit with meals, as snacks, or as a dessert.



4 Vary your veggies

Try adding fresh, frozen, or canned vegetables to salads, sides, and main dishes. Choose a variety of colorful vegetables prepared in healthful ways: steamed, sautéed, roasted, or raw.



5 Make half your grains whole grains

Look for whole grains listed first or second on the ingredients list—try oatmeal, popcorn, whole-grain bread, and brown rice. Limit grain-based desserts and snacks, such as cakes, cookies, and pastries.



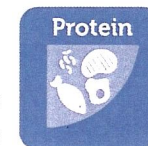
6 Move to low-fat or fat-free milk or yogurt

Choose low-fat or fat-free milk, yogurt, and soy beverages (soymilk) to cut back on saturated fat. Replace sour cream, cream, and regular cheese with low-fat yogurt, milk, and cheese.



7 Vary your protein routine

Mix up your protein foods to include seafood, beans and peas, unsalted nuts and seeds, soy products, eggs, and lean meats and poultry. Try main dishes made with beans or seafood like tuna salad or bean chili.



8 Drink and eat beverages and food with less sodium, saturated fat, and added sugars

Use the Nutrition Facts label and ingredients list to limit items high in sodium, saturated fat, and added sugars. Choose vegetable oils instead of butter, and oil-based sauces and dips instead of ones with butter, cream, or cheese.



9 Drink water instead of sugary drinks

Water is calorie-free. Non-diet soda, energy or sports drinks, and other sugar-sweetened drinks contain a lot of calories from added sugars and have few nutrients.

10 Everything you eat and drink matters

The right mix of foods can help you be healthier now and into the future. Turn small changes into your "MyPlate, MyWins."



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MyPlate
MyWins

Based on the
**Dietary
Guidelines**
for Americans

Build a healthy meal

Each meal is a building block in your healthy eating style. Make sure to include all the food groups throughout the day. Make fruits, vegetables, grains, dairy, and protein foods part of your daily meals and snacks. Also, limit added sugars, saturated fat, and sodium. Use the [MyPlate Daily Checklist](#) and the tips below to meet your needs throughout the day.

1 Make half your plate veggies and fruits

Vegetables and fruits are full of nutrients that support good health. Choose fruits and red, orange, and dark-green vegetables such as tomatoes, sweet potatoes, and broccoli.



6 Get creative in the kitchen

Whether you are making a sandwich, a stir-fry, or a casserole, find ways to make them healthier. Try using less meat and cheese, which can be higher in saturated fat and sodium, and adding in more veggies that add new flavors and textures to your meals.

2 Include whole grains

Aim to make at least half your grains whole grains. Look for the words "100% whole grain" or "100% whole wheat" on the food label. Whole grains provide more nutrients, like fiber, than refined grains.



7 Take control of your food

Eat at home more often so you know exactly what you are eating. If you eat out, check and compare the nutrition information. Choose options that are lower in calories, saturated fat, and sodium.



3 Don't forget the dairy

Complete your meal with a cup of fat-free or low-fat milk. You will get the same amount of calcium and other essential nutrients as whole milk but fewer calories. Don't drink milk? Try a soy beverage (soymilk) as your drink or include low-fat yogurt in your meal or snack.



8 Try new foods

Keep it interesting by picking out new foods you've never tried before, like mango, lentils, quinoa, kale, or sardines. You may find a new favorite! Trade fun and tasty recipes with friends or find them online.

4 Add lean protein

Choose protein foods such as lean beef, pork, chicken, or turkey, and eggs, nuts, beans, or tofu. Twice a week, make seafood the protein on your plate.



9 Satisfy your sweet tooth in a healthy way

Indulge in a naturally sweet dessert dish—fruit! Serve a fresh fruit salad or a fruit parfait made with yogurt. For a hot dessert, bake apples and top with cinnamon.

5 Avoid extra fat

Using heavy gravies or sauces will add fat and calories to otherwise healthy choices. Try steamed broccoli with a sprinkling of low-fat parmesan cheese or a squeeze of lemon.

10 Everything you eat and drink matters

The right mix of foods in your meals and snacks can help you be healthier now and into the future. Turn small changes in how you eat into your MyPlate, MyWins.



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Eating better on a budget

Get the most for your budget! There are many ways to save money on the foods that you eat. The three main steps are planning before you shop, purchasing the items at the best price, and preparing meals that stretch your food dollars.

1 Plan, plan, plan!

Before you head to the grocery store, plan your meals for the week. Include meals like stews, casseroles, or soups, which "stretch" expensive items into more portions. Check to see what foods you already have and make a list for what you need to buy.



6 Convenience costs... go back to the basics

Convenience foods like frozen dinners, pre-cut fruits and vegetables, and take-out meals can often cost more than if you were to make them at home. Take the time to prepare your own—and save!

2 Get the best price

Check the local newspaper, online, and at the store for sales and coupons. Ask about a loyalty card for extra savings at stores where you shop. Look for specials or sales on meat and seafood—often the most expensive items on your list.

7 Easy on your wallet

Certain foods are typically low-cost options all year round. Try beans for a less expensive protein food. For vegetables, buy cabbage, sweet potatoes, or low-sodium canned tomatoes. As for fruits, apples and bananas are good choices.



3 Compare and contrast

Locate the "Unit Price" on the shelf directly below the product. Use it to compare different brands and different sizes of the same brand to determine which is the best buy.

4 Buy in bulk

It is almost always cheaper to buy foods in bulk. Smart choices are large containers of low-fat yogurt and large bags of frozen vegetables. Before you shop, remember to check if you have enough freezer space.



8 Cook once...eat all week!

Prepare a large batch of favorite recipes on your day off (double or triple the recipe). Freeze in individual containers. Use them throughout the week and you won't have to spend money on take-out meals.

9 Get creative with leftovers

Spice up your leftovers—use them in new ways. For example, try leftover chicken in a stir-fry, over a garden salad, or in chili. Remember, throwing away food is throwing away your money!

5 Buy in season

Buying fruits and vegetables in season can lower the cost and add to the freshness! If you are not going to use them all right away, buy some that still need time to ripen.

10 Eating out

Restaurants can be expensive. Save money by getting the early bird special, going out for lunch instead of dinner, or looking for "2 for 1" deals. Ask for water instead of ordering other beverages, which add to the bill.



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MyPlate MyWins

Based on the
Dietary
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Choosing whole-grain foods

Whole grains are important sources of nutrients such as zinc, magnesium, B vitamins, and fiber. There are many choices available to make half your grains whole grains. But whole-grain foods should be handled with care. Over time and if not properly stored, oils in whole grains can cause spoilage. Consider these tips to select whole-grain products and keep them fresh to eat.

1 Search the label

Whole grains can be an easy choice when preparing meals. Choose whole-grain breads, breakfast cereals, and pastas. Look at the Nutrition Facts labels and ingredients lists to find choices lower in sodium, saturated fat, and added sugars.

Serving Size 1/2 cup (40g)		Calories 150	
% Daily Value*		% Daily Value*	
Total Fat 1g	2%	Total Fat 1g	2%
Saturated Fat 0.5g	10%	Saturated Fat 0.5g	10%
Trans Fat 0g	0%	Trans Fat 0g	0%
Cholesterol 0mg	0%	Cholesterol 0mg	0%
Sodium 20mg	4%	Sodium 20mg	4%
Total Carbohydrate 30g	6%	Total Carbohydrate 30g	6%
Dietary Fiber 1g	2%	Dietary Fiber 1g	2%
Sugars 10g	20%	Sugars 10g	20%
Protein 5g	10%	Protein 5g	10%
*Percent Daily Values are based on a diet of other people's secrets.			

2 Look for the word "whole" at the beginning of the ingredients list

Some whole-grain ingredients include whole oats, whole-wheat flour, whole-grain corn, whole-grain brown rice, and whole rye. Foods that say "multi-grain," "100% wheat," "high fiber," or are brown in color may not be a whole-grain product.

3 Choose whole grains at school

Prepare meals and snacks with whole grains at home so your kids are more likely to choose whole-grain foods at school.



4 Find the fiber on label

If the product provides at least 3 grams of fiber per serving, it is a good source of fiber. If it contains 5 or more grams of fiber per serving, it is an excellent source of fiber.

5 Is gluten in whole grains?

People who can't eat wheat gluten can eat whole grains if they choose carefully. There are many whole-grain products, such as buckwheat, certified gluten-free oats or oatmeal, popcorn, brown rice, wild rice, and quinoa that fit gluten-free diet needs.

6 Check for freshness

Buy whole-grain products that are tightly packaged and well sealed. Grains should always look and smell fresh. Also, check the expiration date and storage guidelines on the package.

7 Keep a lid on it

When storing whole grains from bulk bins, use containers with tight-fitting lids and keep in a cool, dry location. A sealed container is important for maintaining freshness and reducing bug infestations.



8 Buy what you need

Purchase smaller quantities of whole-grain products to reduce spoilage. Most grains in sealed packaging can be kept in the freezer.

9 Wrap it up

Whole-grain bread is best stored at room temperature in its original packaging, tightly closed with a quick-lock or twist tie. The refrigerator will cause bread to lose moisture quickly and become stale. Properly wrapped bread will store well in the freezer.



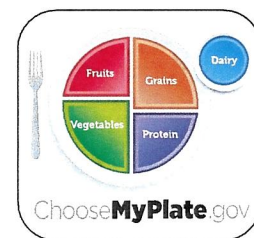
10 What's the shelf life?

Since the oil in various whole-grain flours differs, the shelf life varies too. Most whole-grain flours keep well in the refrigerator for 2 to 3 months and in the freezer for 6 to 8 months. Cooked brown rice can be refrigerated 3 to 5 days and can be frozen up to 6 months.

10 tips

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healthy eating for an active lifestyle



10 tips for combining good nutrition and physical activity

For youth and adults engaging in physical activity and sports, healthy eating is essential for optimizing performance. Combining good nutrition with physical activity can lead to a healthier lifestyle.

1 maximize with nutrient-packed foods

Give your body the nutrients it needs by eating a variety of nutrient-packed food, including whole grains, lean protein, fruits and vegetables, and low-fat or fat-free dairy. Eat less food high in solid fats, added sugars, and sodium (salt).

2 energize with grains

Your body's quickest energy source comes from foods such as bread, pasta, oatmeal, cereals, and tortillas. Be sure to make at least half of your grain food choices whole-grain foods like whole-wheat bread or pasta and brown rice.

3 power up with protein

Protein is essential for building and repairing muscle. Choose lean or low-fat cuts of beef or pork, and skinless chicken or turkey. Get your protein from seafood twice a week. Quality protein sources come from plant-based foods, too.

4 mix it up with plant protein foods

Variety is great! Choose beans and peas (kidney, pinto, black, or white beans; split peas; chickpeas; hummus), soy products (tofu, tempeh, veggie burgers), and unsalted nuts and seeds.

5 vary your fruits and vegetables

Get the nutrients your body needs by eating a variety of colors, in various ways. Try blue, red, or black berries; red and yellow peppers; and dark greens like spinach and kale. Choose fresh, frozen, low-sodium canned, dried, or 100 percent juice options.



6 don't forget dairy

Foods like fat-free and low-fat milk, cheese, yogurt, and fortified soy beverages (soymilk) help to build and maintain strong bones needed for everyday activities.

7 balance your meals

Use MyPlate as a reminder to include all food groups each day. Learn more at www.ChooseMyPlate.gov.

8 drink water

Stay hydrated by drinking water instead of sugary drinks. Keep a reusable water bottle with you to always have water on hand.

9 know how much to eat

Get personalized nutrition information based on your age, gender, height, weight, current physical activity level, and other factors. Use SuperTracker to determine your calorie needs, plan a diet that's right for you, and track progress toward your goals. Learn more at www.SuperTracker.usda.gov.

10 reach your goals

Earn Presidential recognition for reaching your healthy eating and physical activity goals. Log on to www.presidentschallenge.org to sign up for the Presidential Active Lifestyle Award (PALA+).



Go to www.ChooseMyPlate.gov and
www.Fitness.gov for more information.

DG TipSheet No. 25
March 2013
Center for Nutrition Policy and Promotion
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be choosy in the dining hall



10 tips for healthy eating in the dining hall

Dining halls are full of healthy food options. You just need to know which foods to put on your tray. Use these tips to plan your food choices and know which options are best for you.

1 know what you're eating

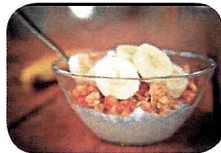
Many dining halls post menus with nutrition information. Look at the menus ahead of time, so you can be ready to create healthy, balanced meals when you get there. Having a plan is the first step in making smarter eating decisions! Visit ChooseMyPlate.gov to find information and tools like SuperTracker to help you make meal selection a breeze.

2 enjoy your food, but eat less

Everybody loves the all-you-can-eat dining hall! To resist the urge of eating too much, take smaller portions and use a smaller plate. Remember you can always go back if you are still hungry.

3 make half your grains whole grains!

Whether you're at the sandwich station or pouring yourself a bowl of cereal in the morning, make the switch to whole grains like 100% whole-grain bread and oatmeal.



4 re-think your drink

Americans drink about 400 calories every day. Consider how often you drink sugary beverages such as sodas, cappuccinos, energy drinks, fruit beverages, sweetened teas, and sports drinks. Drinking water instead of sugary beverages can help you manage your calories.

5 make half your plate fruits and veggies

Fruits and veggies can make your meals more nutritious, colorful, and flavorful. Add to pastas, eggs, pizza, sandwiches, and soups. Try spinach in a wrap or add pineapple to your pizza.



6 make it your own!

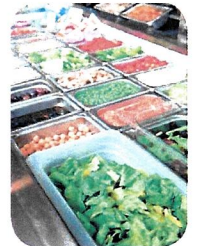
Don't feel like you have to choose pre-made plates. Design your own meal! Fresh veggies from the salad bar can be thrown into your omelet for brunch, or grab some tofu on your way to the pasta station for lean protein.

7 slow down on the sauces

Sauces, gravies, and dressings tend to be high in fat and sodium. Watch out for foods prepared with a lot of oil, butter, or topped with heavy condiments, such as mayonnaise. You don't have to do away with sauces and condiments all together; just ask for less or put them on the side. Reducing extras will help you manage your weight.

8 be on your guard at the salad bar

Most veggies get the green light but limit foods high in fat and sodium such as olives, bacon bits, fried noodles, croutons, and pasta or potato salads that are made with mayo and oil. Stick to fat-free or low-fat dressings on the side.



9 make dessert special

Save dessert for a Friday night treat or on special occasions. When you can't resist, opt for something healthy, such as a fruit and yogurt parfait.

10 don't linger

Dining halls should be just that, where you eat. Although it's great to chat with friends while you eat, avoid staying for long periods of time to reduce your temptation to keep eating.

FUELING FOR RECOVERY

I am a collegiate soccer player. Often, after a hard practice, my legs feel heavy and sore, and I am tired and sluggish. My performance at practice, especially the next day, and during strength training, seems to suffer because I can't give 100 percent.

I drink plenty of water and try to sip on sports drinks during practice, but what more can I do to have more energy and improve my performance?



GOALS OF RECOVERY NUTRITION

- Restore fluids and electrolytes lost through sweat during activity.
- Replace muscle fuel (carbohydrates) burned during exercise.
- Provide protein to promote muscle repair and growth.

(For what to eat to fuel your recovery, turn the page.)



Information presented by



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and Dietetics

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EATING FOR OPTIMAL RECOVERY

Recovery nutrition should include carbohydrates (to replace glycogen), protein (to repair muscle and tissue damage caused by the stress of exercise) and fluids (for hydration). Look for something containing about half of your body weight in grams of carbohydrates (e.g., if you weigh 150 pounds, aim for 75 grams of carbohydrates) along with 15-25 grams of protein. If you have a low appetite after exercising, a liquid food option may be the best place to start.

Examples of good recovery snacks:

- Low-fat chocolate milk
- Fruit and yogurt smoothie
- Graham crackers with peanut butter and low-fat milk
- Greek yogurt with fruit
- Apple or banana with nut butter and low-fat milk
- Trail mix, including nuts and dried fruits, and a sports drink

Following up your recovery snack with well-balanced meals throughout the day is ideal. Examples include:

- Two to three scrambled eggs, two pieces of whole-wheat toast with jelly, and a side of mixed berries
- Grilled chicken with a small baked potato and green beans
- Whole-wheat spaghetti with marinara or tomato-based meat sauce made from lean ground beef, and a side salad
- Baked fish with brown rice and mixed vegetables
- Turkey sandwich on whole-wheat bread with a glass of low-fat milk and an apple
- Grilled chicken on salad greens with low-fat dressing and a whole-wheat dinner roll

THE PROCESS

When you exercise, the primary source of energy your body uses is carbohydrates. After burning through what is readily available in your bloodstream, your body moves on to your carbohydrate stores — the glycogen that is stored in your muscles and liver.

You have a limited amount of glycogen stored in your body, most likely enough to get you through a typical practice. What happens, though, when you have to be in the weight room that same afternoon and you haven't replaced those stores — heavy/sore muscles, fatigue, injuries, feeling like you are “running out of gas”?

Give it time. Recovery is an all-day process! It takes anywhere from 24 to 48 hours to fully replace your glycogen stores. Within 30 to 60 minutes after exercise, your body is able to synthesize glycogen from the carbohydrates you eat at a much faster rate. Your heart rate and blood pressure also are elevated, so nutrients are delivered to your muscles and cells quicker.

Fuel your muscles. Your body also uses the carbohydrates and protein you eat during this window of opportunity to help prevent further muscle breakdown; and your body's hormonal response to carbohydrates “flips a switch” from muscle breakdown to muscle building. Take advantage of quick-digesting, simple carbohydrates and liquids (e.g., chocolate milk or smoothies) immediately after practice. Follow this with a well-balanced meal within four hours.



Written by SCAN Registered Dietitians (RDs). For advice on customizing a recovery plan, consult a RD who specializes in sports, particularly a Board-Certified Specialist in Sports Dietetics (CSSD). Find a SCAN RD at www.scandpg.org.



SMART Goals

What is SMART goal setting?

Goal setting can be a difficult task for some people. SMART goal setting is the easiest resource to create obtainable goals and to test the merit of existing ones. This worksheet is designed to help you create SMARTer goals. Begin by writing down a goal you would like to achieve then work through each letter of the word SMART. Each area will add more to your goal until you have a complete SMART goal.

5 Key steps:

Specific– The best smart goals will answer the questions such as who, what, when, & where.

Measurable– pertains to goals that are quantifiable

Attainable– goals should be written within your control and influence. Is the goal achievable with the given resources?

Realistic– Important to include goals that are consistent with the mission. Evaluate your situation and recognize which ones are realistic and far fetched.

Time-Bound– Goals with timeframes will provide a specific timeframe in which you want to accomplish your goals. A goal cannot be a goal with a timeframe attached to it.



SMART Goals

Take a minute to write down your own SMART goals

“Create goals that set you on fire.”– Unknown

	Goal 1	Goal 2
Specific What is the desired result? (who, what, when, why, how)		
Measurable <ul style="list-style-type: none">• How can you quantify (numerically or descriptively) completion?• How can you measure progress?		
Achievable <ul style="list-style-type: none">• What skills are needed?• What resources are necessary?• How does the environment impact goal achievement?• Does the goal require the right amount of effort?		
Realistic Is the goal in alignment with the overall mission or strategy?		
Time-bound <ul style="list-style-type: none">• What is the deadline?• Is the deadline realistic?		

Outcomes vs. Behaviors

Developing a goal is a complex task. If you have big goals, the best way to approach them is to take small, consistent daily actions. These are your **behaviors**. You are in complete control of your behaviors but the world is pretty uncontrollable, life happens!

For example:

If you want to go out for 18 holes, you can go to your local sports goods store and buy the latest and most advanced golf equipment, **but you can't control the weather**.

If you want to sell your house for a good price, you can renovate and paint but unfortunately **you can't control the real estate market**.

In regards to wellness:

You can't *make* your body lose 20 lbs of fat, gain 20 lbs of muscle, improve your VO2max, and/or improve your cholesterol numbers on command or within a specific time frame. **But you *can* control the behaviors that lead to the outcome you want.**

Outcomes are WHAT you want and Behaviors are HOW you'll get there, behavior goals give you an action plan.

Outcome Goals	Behavior Goals
Run a 5K race in 20 minutes	Run for 20 minutes three times per week for the next month, gradually increasing the duration and speed
Eat better	Gradually begin to incorporate eating habits from this class and UYM into your daily routine, one by one.

I have given you all a sheet of paper with 4 circles on it. ***Refer to paper***

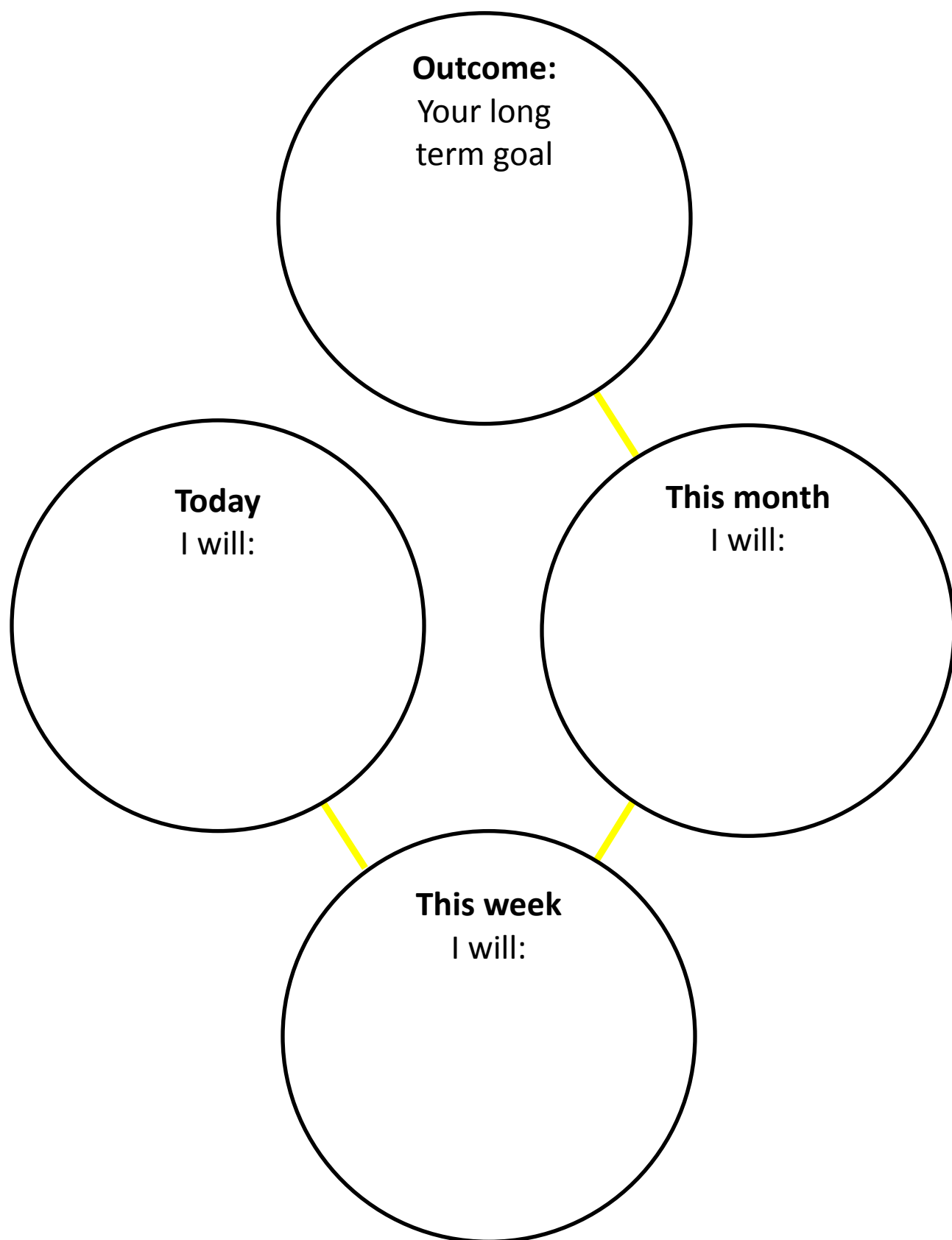
In the circle that says "Outcome": Identify what your outcome or long term goal is and write it in this circle. (Refer to long term goals you discussed with your Health Educator in BOD POD or Metabolic appt)

In the circle that says "This Month": Write what you will do this month to get to your outcome goal.

In the circle that says "This Week": Write what you will do this week to get to your outcome goal.

In the circle that says "Today": Write what you will do today to get to your outcome goal.

****Behavior goals are things you do consistently and regularly. Small, manageable tasks that are within your control and often things you can do right now, today, or in the near future. When done *consistently*, you will move in the right direction. Incorporate SMART goals to determine behavior goals. Be realistic, start small and succeed, and focus on doing one small achievable behavior at a time.****



Recommended Resources

Healthy Nutrition Websites:

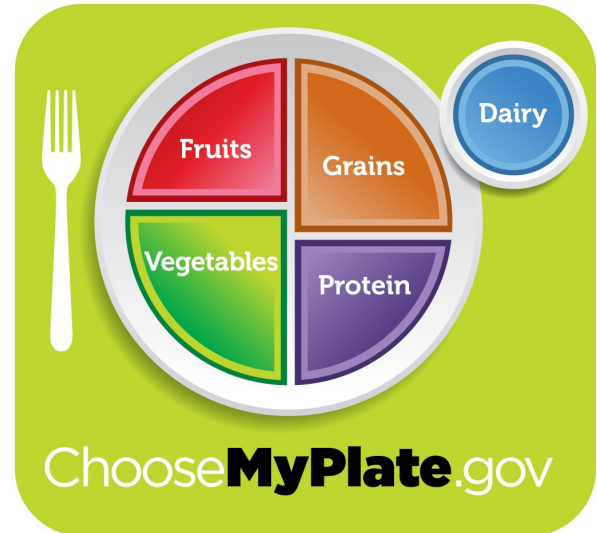
www.myfitnesspal.com

www.sparkpeople.com

www.eatright.org

www.choosemyplate.gov

www.calorieking.com



Organizations:



Physical Fitness Websites:

www.livestrong.com

www.exrx.net

www.exerciseismedicine.org

<http://www.acsm.org/access-public-information/brochures-fact-sheets/brochures>

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