

THE

SANDBAG

SERIES

POWERED BY NOFFS



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NOFFS
Navy Operational Fitness and Fueling System

FUELING STRATEGIES

NUTRITION CONSIDERATIONS: AUSTERE ENVIRONMENTS

Even though you may not be using traditional workout equipment in Austere Environments, your body is still burning fuel and breaking down. To maximize your training, make sure you're getting enough nutrients. Proper planning is going to be crucial. Use these tips to ensure you're giving your body what it needs:

- 1. MAINTAIN FUEL.** Low Fuel = Decreased Performance. Make sure you stay fueled throughout the day with packed snacks that combine carbs, protein and fat.
- 2. USE BARS WISELY.** Fuel on-the-go with bars. Choose bars with at least 30 g of carbohydrate, 3 g of fiber and 10-30 g of protein.
- 3. MINIMIZE DEHYDRATION.** Minimal Dehydration = Decreased Performance. Keep a water bottle with you at all times to stay hydrated.

TO MAXIMIZE YOUR PERFORMANCE GAINS YOU NEED TO:

FUEL.

- Use the Meal Builder to guide your nutrition and get the energy (calories) your body needs to support your activity.
- Meet your carbohydrate needs through high-fiber, minimally processed carbs.
- Meet your protein needs of about 0.8 g per pound per day.
- Focus on getting enough carbs before and during your workout to fuel your body.

SUSTAIN.

- If your training is longer than an hour, enhance your performance by consuming 30-60 g of carbohydrate an hour through sports drinks, gels, or other carbs. If you're training at high intensity, long duration, or in extreme heat or humidity, choose a sport drink with at least 110 mg of sodium per 8 ounces to maximize hydration and prevent cramping. sports drink that has at least 110mg of sodium per 8oz to maximize hydration and prevent cramping
- Weigh yourself before and after your training and aim to lose less than 2% of your body weight during the session. (Please refer to the Hydration Section of NOFFS I for more information.)

RECOVER.

- Recover with a 3:1 carb to protein ratio within the first 30 minutes of completing your training session.

FOUNDATIONAL NUTRITION

Optimizing your foundational nutrition will ensure you have a solid fueling base to optimize performance and recovery. Below you will find a review of the basic fueling principles. For more information on these areas, refer back to Fueling Series.



EATING CLEAN: This means eating whole natural foods, such as fruits, vegetables, lean proteins, and high-fiber carbohydrates, and limiting processed foods, fast food, and foods high in sugar and fat.

EATING OFTEN: Eating frequently helps control blood sugar and energy levels. Opt for five or six meals/snacks a day, which is equivalent to eating every 2.5 – 3 hours.

HYDRATE: To stay hydrated aim to drink ½ to 1 ounce per pound of body weight per day. Make water and other naturally non-caloric beverages your first drink choice.

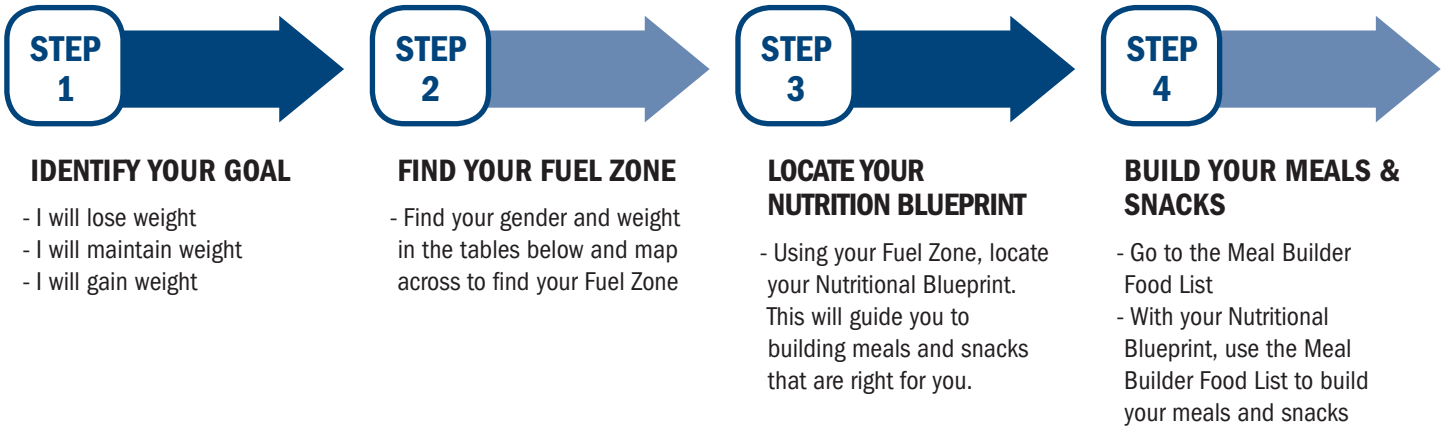
RECOVER: To avoid wasting your workout, eat a combination of carbs and protein within 30 minutes of completing your workout. Proper nutrition at the proper time will help you refuel, rehydrate, rebuild your body, and reach your goal quicker.

MINDSET: Use food to fuel your body for maximum performance. Strive to choose the foods that are best for you at least 80% of the time and enjoy other foods 20% of the time.

MEAL BUILDER

The biggest barriers to great nutrition are poor planning and poor implementation. The nutrition blueprint and meal builder make it easy to build meals and snacks that will keep you fueled and help you reach your goals. This tool will help you stay organized and create an environment for success. Always remember the 80/20 rule as you look to sustainably upgrade your nutrition. Choose high octane fuel 80% of the time and lower octane fuel that you really enjoy 20% of the time.

BUILD YOUR MEAL IN 4 SIMPLE STEPS



SET YOUR GOAL, FIND YOUR FUEL ZONE

I WILL FUEL TO...

	LOSE WEIGHT		MAINTAIN WEIGHT		GAIN WEIGHT		
	CURRENT WEIGHT	FUEL ZONE	CURRENT WEIGHT	FUEL ZONE	CURRENT WEIGHT	FUEL ZONE	
STEP 1 ↓ STEP 2	FEMALE	100 - 125	1400 - 1600	Under 105	2000 - 2200	100 - 110	2800 - 3000
		125 - 150	1600 - 1800	105 - 130	2200 - 2400	110 - 140	3000 - 3200
		150 - 180	1800 - 2000	130 - 160	2400 - 2600	140 - 165	3200 - 3400
		180 - 205	2000 - 2200	160 - 185	2600 - 2800	165 - 195	3400 - 3600
		205 - 235	2200 - 2400	185 - 210	2800 - 3000	195 - 220	3600 - 3800
		235 - 260	2400 - 2600				
MALE	Under 140	1800 - 2000	Under 140	2600 - 2800	Under 140	3400 - 3600	
	140 - 155	2000 - 2200	140 - 160	2800 - 3000	145 - 165	3600 - 3800	
	155 - 175	2200 - 2400	160 - 180	3000 - 3200	165 - 185	3800 - 4000	
	175 - 190	2400 - 2600	180 - 195	3200 - 3400	185 - 205	4000 - 4200	
	190 - 210	2600 - 2800	195 - 215	3400 - 3600	205 - 220	4200 - 4400	
	210 - 230	2800 - 3000	215 - 235	3600 - 3800	220 - 240	4400 - 4600	
	230 - 250	3000 - 3200	235 - 255	3800 - 4000			
	250 - 265	3200 - 3400	255 - 275	4000 - 4200			
	265 - 285	3400 - 3600					
	285 - 305	3600 - 3800					

STEP 3 

Locate Your Nutrition Blueprint - The Sandbag Training Series

Using the Fuel Zone you identified in Steps 1 & 2, locate your personal Nutritional Blueprint to fit your caloric needs. Your blueprint has six columns across the top that represent meal times, or “fueling times”. The food groups are represented along the left hand side, and the numbers located within the zone are the recommended number of servings from each food group at each fueling time.

1400 - 1600	BREAKFAST	SNACK	LUNCH	SNACK	DINNER	SNACK
Grains	2	1	1 to 2	1	1 to 2	
Proteins	1		1		1	1
Fruits	0 to 1	1	1	1	1	1
Vegetables	∞	∞	∞	∞	∞	∞
Fats	1	1	1	1	1	0 to 1
Calorie Range	350 - 400	175-200	280 - 320	175 - 200	280 - 320	140 - 160
*Meal Replacement Shake or Bar		1		1+ fruit		1

2200 - 2400	BREAKFAST	SNACK	LUNCH	SNACK	DINNER	SNACK
Grains	3	2	2 to 3	2	2 to 3	1
Proteins	1 to 2	1	1	1	1	1
Fruits	2	1	2	1	2	1
Vegetables	∞	∞	∞	∞	∞	∞
Fats	1	1	1	1	1	1
Calorie Range	550 - 600	275 - 300	440 - 480	275 - 300	400 - 440	200 - 220
*Meal Replacement Shake or Bar		1+ fruit		1+2 fruit		1+ fruit

1600 - 1800	BREAKFAST	SNACK	LUNCH	SNACK	DINNER	SNACK
Grains	2	1 to 2	2	1 to 2	2	
Proteins	1		1		1	1
Fruits	1	1	1	1	1	1
Vegetables	∞	∞	∞	∞	∞	∞
Fats	1	1	1	1	1	1
Calorie Range	400 - 450	200 - 225	320 - 360	200 - 225	320 - 360	160 - 180
*Meal Replacement Shake or Bar		1		1+ fruit		1

2400 - 2600	BREAKFAST	SNACK	LUNCH	SNACK	DINNER	SNACK
Grains	3	2	3	2	3	1
Proteins	2	1	1	1	1	1
Fruits	2	1	2	1	1 to 2	1
Vegetables	∞	∞	∞	∞	∞	∞
Fats	1	1 to 2	1	1 to 2	1	1
Calorie Range	600 - 650	300 - 325	480 - 520	300 - 325	480 - 520	240 - 260
*Meal Replacement Shake or Bar		1+ fruit +1 fat		1+2 fruit +1 fat		1+ fruit +1 fat

1800 - 2000	BREAKFAST	SNACK	LUNCH	SNACK	DINNER	SNACK
Grains	2 to 3	1 to 2	2	1 to 2	2	
Proteins	1	0 to 1	1	0 to 1	1	1
Fruits	1 to 2	1	1 to 2	1	1	1
Vegetables	∞	∞	∞	∞	∞	∞
Fats	1	1	1	1	1	1
Calorie Range	450 - 500	225 - 250	360 - 400	225 - 250	360 - 400	180 - 200
*Meal Replacement Shake or Bar		1+ fruit		1+ 2 fruit		1

2600 - 2800	BREAKFAST	SNACK	LUNCH	SNACK	DINNER	SNACK
Grains	3	2	3	2	3	1
Proteins	2	1	1	1	1 to 2	1
Fruits	2	1	2	1	2	1 to 2
Vegetables	∞	∞	∞	∞	∞	∞
Fats	1 to 2	1 to 2	1 to 2	1 to 2	1	1
Calorie Range	650 - 700	325 - 350	520 - 560	325 - 350	520 - 560	260 - 280
*Meal Replacement Shake or Bar		1+ fruit +1 fat		1+2 fruit +1 fat		1+ fruit +1 fat

2000 - 2200	BREAKFAST	SNACK	LUNCH	SNACK	DINNER	SNACK
Grains	3	2	2	2	2	0 to 1
Proteins	1	0 to 1	1	0 to 1	1	1
Fruits	2	1	2	1	2	1
Vegetables	∞	∞	∞	∞	∞	∞
Fats	1	1	1	1	1	1
Calorie Range	500 - 550	250 - 275	400 - 440	250 - 275	400 - 440	200 - 220
*Meal Replacement Shake or Bar		1+ fruit		1+ 2 fruit		1+ fruit

2800 - 3000	BREAKFAST	SNACK	LUNCH	SNACK	DINNER	SNACK
Grains	3	2	3	2	3	1
Proteins	2	1	1	1	2	1
Fruits	2 to 3	1	2	1	1 to 2	2
Vegetables	∞	∞	∞	∞	∞	∞
Fats	2	1 to 2	2	1 to 2	1	1
Calorie Range	700 - 750	350 - 375	560 - 600	350 - 375	560 - 600	280 - 300
*Meal Replacement Shake or Bar		1+ fruit +1 fat		1+2 fruit +1 fat		1+ fruit +1 fat

3000 - 3200	BREAKFAST	SNACK	LUNCH	SNACK	DINNER	SNACK
Grains	3	2	3	2	3	1 to 2
Proteins	2	1	1 to 2	1	2	1
Fruits	3	1	2	1	2	2
Vegetables	∞	∞	∞	∞	∞	∞
Fats	2	1 to 2	2	1 to 2	1 to 2	1
Calorie Range	750 - 800	375 - 400	600 - 640	375 - 400	600 - 640	300 - 320
*Meal Replacement Shake or Bar		1+ fruit +1 fat		1+2 fruit +1 fat		1+ fruit +1 fat

3200 - 3400	BREAKFAST	SNACK	LUNCH	SNACK	DINNER	SNACK
Grains	3 to 4	2	3	2	3	2
Proteins	2	1	2	1	2	1
Fruits	3	1	2	1	2	2
Vegetables	∞	∞	∞	∞	∞	∞
Fats	2	1 to 2	2	1 to 2	2	1
Calorie Range	800 - 850	400 - 425	640 - 680	400 - 425	640 - 680	320 - 340
*Meal Replacement Shake or Bar		1+2 fruit +1 fat		1+2 fruit +1 fat		1+2 fruit +1 fat

3400 - 3600	BREAKFAST	SNACK	LUNCH	SNACK	DINNER	SNACK
Grains	4	2 to 3	3	2 to 3	3 to 4	2
Proteins	2	1	2	1	2	1
Fruits	3 to 4	1	2	1	2	2
Vegetables	∞	∞	∞	∞	∞	∞
Fats	2	1 to 2	2 to 3	1 to 2	2	1 to 2
Calorie Range	850 - 900	425 - 450	680 - 720	425 - 450	680 - 720	340 - 360
*Meal Replacement Shake or Bar		1+2 fruit +1 fat		1+2 fruit +2 fat		1+2 fruit +1 fat

3600 - 3800	BREAKFAST	SNACK	LUNCH	SNACK	DINNER	SNACK
Grains	4	2 to 3	3 to 4	2 to 3	4	2
Proteins	2	1	2	1	2	1
Fruits	4	1	2	1	2	2
Vegetables	∞	∞	∞	∞	∞	∞
Fats	2 to 3	1 to 2	3	1 to 2	2	1
Calorie Range	900 - 950	450 - 475	720 - 760	450 - 475	720 - 760	360 - 380
*Meal Replacement Shake or Bar		1+2 fruit +1 fat		1+2 fruit +2 fat		1+2 fruit +1 fat

COACH TIP:

Remember, the biggest barriers to great nutrition are poor planning and poor implementation. Stay organized and do what you can to create an environment for success. To get you started, make a copy of your Nutrition Blueprint and put it somewhere you'll have easy access to when making fueling decisions, like in your wallet or on your fridge.

3800 - 4000	BREAKFAST	SNACK	LUNCH	SNACK	DINNER	SNACK
Grains	4	3	4	3	4 to 5	2
Proteins	2	1	2	1	2	1
Fruits	4	1	2	1	2	2
Vegetables	∞	∞	∞	∞	∞	∞
Fats	3	1 to 2	3	1 to 2	2	1 to 2
Calorie Range	950 - 1000	475 - 500	760 - 800	475 - 500	760 - 800	380 - 400
*Meal Replacement Shake or Bar		1+2 fruit +1 fat		1+2 fruit +2 fat		1+2 fruit +1 fat

4000 - 4200	BREAKFAST	SNACK	LUNCH	SNACK	DINNER	SNACK
Grains	4	3	4	3	4 to 5	2
Proteins	2	1	2	1	2	1
Fruits	4	1	2	1	2	2
Vegetables	∞	∞	∞	∞	∞	∞
Fats	3	2	3	2	2	1 to 2
Calorie Range	1000 - 1050	500 - 525	800 - 840	500 - 525	800 - 840	400 - 420
*Meal Replacement Shake or Bar		1+2 fruit +2 fat		1+2 fruit +2 fat		1+2 fruit +2 fat

4200 - 4400	BREAKFAST	SNACK	LUNCH	SNACK	DINNER	SNACK
Grains	4	3	4	3	5	2
Proteins	2	1	2	1	2	1
Fruits	4	1	2	1	2	2
Vegetables	∞	∞	∞	∞	∞	∞
Fats	3	2 to 3	3	2 to 3	2	1 to 2
Calorie Range	1050 - 1100	525 - 550	840 - 880	525 - 550	840 - 880	420 - 440
*Meal Replacement Shake or Bar		1+2 fruit +2 fat		1+2 fruit +2 fat		1+2 fruit +2 fat

4400 - 4600	BREAKFAST	SNACK	LUNCH	SNACK	DINNER	SNACK
Grains	4	3	4 to 5	3	5	2
Proteins	2	1	2	1	2	1
Fruits	4	1	2	1	2	2
Vegetables	∞	∞	∞	∞	∞	∞
Fats	3	2 to 3	3	2 to 3	2	1 to 2
Calorie Range	1100 - 1150	550 - 575	880 - 920	550 - 575	880 - 920	440 - 460
*Meal Replacement Shake or Bar		1+ 2 fruit +2 fat		1+2 fruit +2 fat		1+2 fruit +2 fat

*When choosing meal replacements:

1. Make sure it fits within your calorie recommendations
2. Should have at least 3g of fiber
3. Should have 10 - 30g of protein for women
4. Should have 15 - 42g of protein for men

MEAL BUILDER

STEP
4

Build Your Meals & Snacks

Using your Nutritional Blueprint, follow the directions below to start filling your day with meals and snacks designed to help you with your goals.

Map Your Blueprint

The food list below has foods from each of the categories found in your Nutrition Blueprint.

Size Up Your Servings

The number to the left of each food item equals one serving (eg, 1 slice of whole wheat bread = 1 grain serving).

Mix It Up

Each serving may be used interchangeably. For example, if you tire of whole wheat toast at breakfast you can replace it with any of the foods listed in the grain column. If you have more than one serving suggested, you can double up on the same food (eg, 2 slices of whole wheat toast) or mix and match (eg, 1 slice of whole wheat toast and 3/4c Multi grain Cheerios). You are limited only by your creativity!

You are now prepared to build customized meals and snacks to help you meet your goals. These meals and snacks will provide you with sustainable fuel throughout the day as well as the energy you need for your workouts. Remember, to maximize your energy and reach your body composition goals, think about both quality and quantity of your food choices.

GRAINS/STARCHES:

Pasta/Rice

- 1/3c Brown Rice (cooked)
- 1/3c Whole Wheat Cous Cous (cooked)
- 1/2c Whole Wheat Pasta (cooked)
- 1/4c Risotto, Quinoa (cooked)

Breads/Tortillas/Rolls

- 1slice Bread (100% Whole Wheat)
- 1/2 Pita Bread (6" diameter each)
- 1/4 Whole Wheat Bagel
- 1/2 English Muffin
- 1/2 Whole Wheat Hamburger/Hot dog Bun
- 1/2 Sub Bread (6" each)
- 1 Whole Wheat Tortilla
- 2 Corn Tortillas
- 1sm. Whole Wheat Roll (1oz each)

Cold Cereals

- 1/2c All Bran Cereal
- 3/4c Cheerios Cereal
- 3/4c Cheerios MultiGrain Cereal
- 1/2c Cracklin Oat Bran Cereal
- 1/2c Frosted Mini Wheats Cereal
- 1/2c Grape Nuts Cereal
- 1/2c Kashi Go Lean Cereal
- 1/2c Kashi Go Lean Crunch Cereal
- 1/2c Kashi Go Lean Honey
- Almond Flax
- 1/2c Muesli Cereal
- 1/2c Raisin Bran Cereal
- 3/4c Smart Start Cereal
- 3/4c Special K Cereal
- 1/2c Whole Wheat Total Cereal

Hot Cereals

- 1/2c Cream of Wheat (cooked)
- 1 Instant Grits
- 1/2 Packet Kashi Instant Oatmeal
- 1/2 Packet Quaker Instant Oatmeal
- 1/2c Slow Cooked Oatmeal

Veggies, Beans, Potatoes

- 1/2c Soy Beans (cooked)
- 1/2c Split Peas (cooked)
- 1c Squash (winter, acorn, butternut)
- 1/2c Peas (cooked)
- 1/2sm Baked Potato
- 1/2c Beans: Black, Kidney, Pinto, Lima, Lentils (cooked/canned)
- 1/2c Corn (cooked)
- 1 Ear of corn
- 1/2c Sweet Potato (cooked)
- 1/2c Yam (cooked)
- 1/2c Mashed Potatoes

Snacks/Crackers/Granola Bars

- 1 Kashi Granola Bar
- 2 Graham Crackers
- 5 Whole Wheat Crackers (baked)
- 4 Whole Wheat Melba Toast
- 1 Nature Valley Granola Bar
- 8 Animal Crackers
- 3c Light Popcorn (popped)

- 3/4c Pretzels
- 2 Rice Cakes (4" diameter each)
- 4 Reduced Fat Triscuits
- 1 Whole Grain Fig Newton

PROTEINS / DAIRY:

Fish/Seafood

- 3oz Fish
- 3oz Cod
- 3oz Flounder
- 3oz Haddock
- 3oz Halibut
- 3oz Salmon
- 3oz Shrimp
- 3oz Trout
- 3oz Tuna

Poultry

- 3oz Chicken (lunch meat)
- 3oz Chicken breast
- 3oz Ground turkey (cooked)
- 3oz Turkey (lunch meat)
- 3oz Turkey breast
- Beef/Pork**
- 3oz Beef (96% lean ground chuck)
- 1.5oz Beef jerky
- 3oz Beef tenderloin
- 3oz London broil
- 3oz Pork (grilled)
- 3oz Roast beef (lunch meat)

Dairy

- 8oz 1% or non-fat regular milk or chocolate milk
- 1/2c Non-fat or low fat cottage cheese
- 1/2c Non-fat frozen yogurt
- 1c Non-fat or low fat greek yogurt
- 8oz Reduced-fat soy milk
- 1 2% String cheese

Eggs

- 1/4c Egg Substitute
- 4 Egg Whites
- 2 Eggs
- 2 Omega-3 Eggs

Legumes

- 1/2c Beans: Black, Kidney, Pinto, Lima, Lentils (cooked/canned)
- 8oz Calcium-fortified light soy milk
- 2T Hummus
- 1/2c Soy beans (cooked)
- 1/2c Split peas
- 1T Almond butter
- 1T Peanut butter (natural)
- 10-15 Raw nuts

MEAL REPLACEMENTS/PROTEIN POWDERS:

- 1-2 scoop Whey Protein*
- 1 Bar
- 1 Shake

*Make sure to choose protein powders that are certified safe and reliable. Check out www.nfsport.com for a complete list.

Meal replacement considerations:

- Make sure it fits within your calorie recommendations
- Should have at least 3g of fiber
- Double check the protein level
 - Women need **10-30g**
 - Men need **15-42g**

VEGETABLES:

Green

- 1c Arugula
- 1/2c Asparagus (cooked)
- 1c Asparagus (raw)
- 1/2c Broccoli (cooked)
- 1c Broccoli (raw)
- 1c Brussel sprouts
- 1/2c Celery (cooked)
- 1c Celery (raw)
- 1c Collards (cooked)
- 1c Cucumber (raw)
- 1/2c Green beans (cooked)
- 1c Green beans (raw)
- 1c Green veggie salad
- 1c Kale (raw)
- 1c Lettuce (all)
- 1c Spinach (raw)

White

- 1/2c Cabbage (cooked)
- 1c Cabbage (raw)
- 1/2c Cauliflower (cooked)
- 1c Cauliflower (raw)
- 1/2c Onions (cooked)
- 1c Onions (raw)
- 1/2c Water chestnuts (cooked)
- 1c Water chestnuts (raw)

Red

- 1/2c Tomato, beets
- 1/2c Salsa, tomato sauce

Orange

- 1/2c Carrots (cooked)
- 1c Carrots (raw)

Mixed Colors

- 1/2c Peppers (cooked)
- 1c Peppers (raw)
- 1/2c Stir fry vegetables (cooked)
- 1c Stir fry vegetables (raw/frozen)
- 6oz Vegetable juice
- 1/2c Zucchini (cooked)
- 1c Zucchini (raw)

FRUITS:

Red

- 1sm. Apple
- 1/2c Applesauce (unsweetened)
- 12 Cherries
- 1c Raspberries
- 1 1/4c Strawberries (whole)
- 1/4c Watermelon (cubed)
- 1/2m. Grapefruit

Orange

- 1c Cantaloupe (cubed)
- 1m. Orange, nectarine or peach
- 1lg. Tangerine

Yellow

- 1/2lg. Banana(s)
- 3/4c Pineapple chunks (in own juice)

Blue/Purple

- 1c Blackberries or boysenberries
- 3/4c Blueberries
- 14 Grapes
- 2sm. Plums
- 3 Prunes (dried plums)
- 2T Raisins

Green

- 1c Honeydew melon (cubed)
- 1sm. Kiwi fruit
- 1sm. Pear

Mixed Colors

- 2T Dried fruit
- 1/2c Fresh fruit salad
- 1/2c Fruit cocktail (own juice)
- 6oz Fruit juice (100% juice)
- 1c Mixed berries (fresh/frozen)

FATS (CHOOSE OFTEN):

- 1T Nut butters: Almond, peanut, etc...
- 10-15 Nuts: Almonds, walnuts, pecans
- 1/4 Avocado
- 12lg. Black or green olives
- 1.5T Plant oils: olive, canola, flax
- 2T Flax seeds
- 2T Hummus
- 2T Seeds: Pumpkin, sesame, sunflower
- 3T Guacamole
- 2t Smart Balance, Benecol

FATS (CHOOSE LESS OFTEN):

- 2t Butter (stick)
- 1oz Cheese
- 1slice Cheese
- 2T Cream cheese
- 4T Half & Half
- 2t Mayonnaise
- 3T Reduced-fat cream cheese
- 4T Reduced-fat sour cream
- 2T Sour cream
- 1 2% String cheese
- 2 Turkey bacon slice
- 1 Turkey sausage link
- 1T Commercial salad dressings

1t = 1 Teaspoon
1T = 1 Tablespoon
1c = 1 Cup
1oz = 1 Ounce

sm. = Small
med. = Medium
lg. = Large