

## Ingredients For Success – How To Avoid the Metabolic Roadblock

With Briana Baker, RDN, LD and Maggie Rettelle, RDN, NBC-HWC

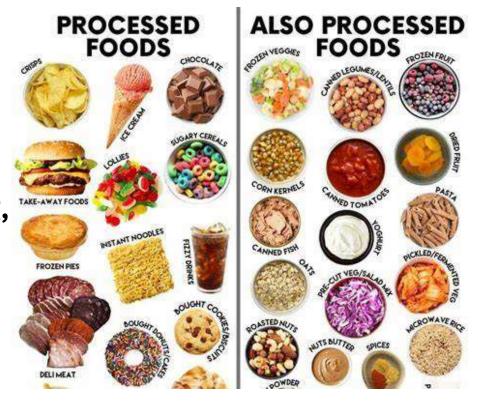




## WHAT IS A PROCESSED FOOD?

- Food that has been:
  - Cooked
  - Canned
  - Frozen
  - Packaged
  - changed in nutritional composition with fortifying, preserving or preparing in different ways

Any time we cook, bake or prepare food, we're processing food







## METABOLIC ROADBLOCK...







## **CHANGING OUR PLATE**

New American Plate - American Institute for Cancer Research (aicr.org)

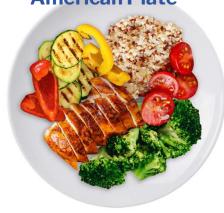
**Stage 1: The Old American Plate** 



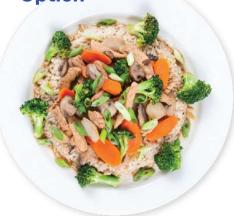
**Stage 2: A Transitional Plate** 



**Stage 3: The New American Plate** 



Stage 4: Another Option



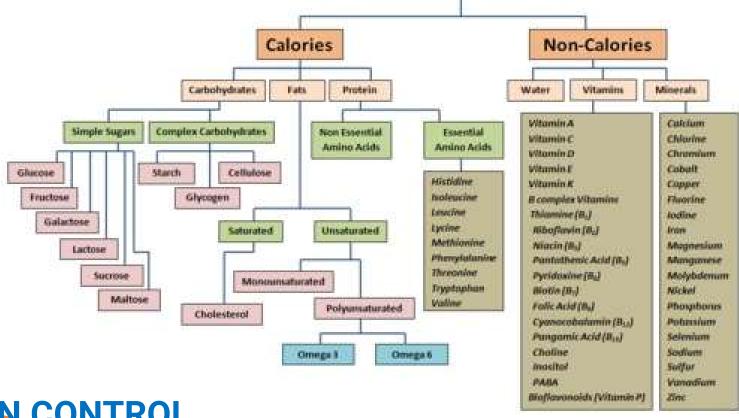




EAT HEALTHY

## WHAT IS NUTRITION?





**PORTION CONTROL** 

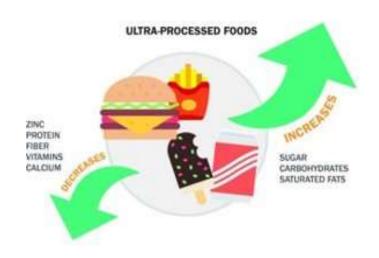


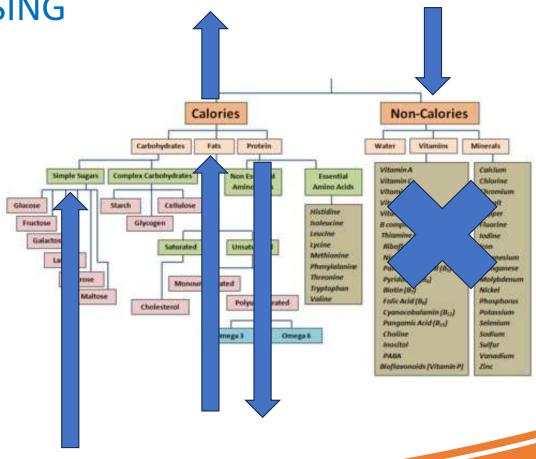
**Fruits** &veggies



macros nutrient dense

HOW DOES FOOD PROCESSING AFFECT **NUTRITION**?



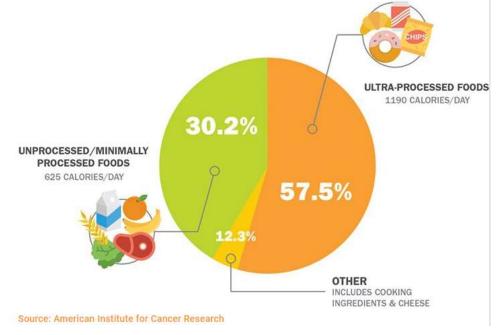






METABOLIC ROADBLOCKS OF HEAVILY PROCESSED FOODS AKA "ULTRA PROCCESSED FOODS" (UPF)

- Increased cancer risk
- Too much sugar, sodium and fat
- Lacking in nutritional value
- Calorie dense and addicting
- Quicker to digest
- Full of artificial ingredients







## PROCESSED FOODS CLASSIFICATION SYSTEMS AROUND THE WORLD (COMBINED)

	Group 1	Group 2	Group 3	Group 4
	Minimally processed	Processed culinary ingredients	Min/Mod processed	<u>Ultra-processed</u>
Description	Simply pre-prepped for convenience, prepared vs processed; Foods that retain most of their inherent properties. Foods processed at their peak to lock in nutritional quality and freshness include canned (no salt added or other ingredients)	Obtained from whole foods in nature. Foods and beverages have been processed but remain as	Contain just two or three	Foods packaged and mixtures store prepared, containing high amounts of total and added sugars and low amounts of dietary fiber; heavily processed foods that have ingredients added for flavor and texture (sweeteners, spices, oils, artificial colors, dyes and additives, non-sugar sweeteners, preservatives and processing aids such as caking and glazing agents, emulsifiers, gums and humectants)
How processed	Fresh, chilled, frozen, vacuum- packed, unsalted, pasteurized or powdered (milk), . roasted, boiled or pasteurized, chopped and bagged	Processes include extraction, pressing, clarification, refining, purification, and milling. Preservation methods such as canning, milling of grain to remove germ and thus reduce spoilage.	Processes include extraction, pressing, clarification, refining, purification, and milling. Preservation methods such as canning, milling of grain to remove germ and thus reduce spoilage.	Foods that have undergone secondary processing into readily edible form, likely to contain high levels of added sugars, fats, or salt.





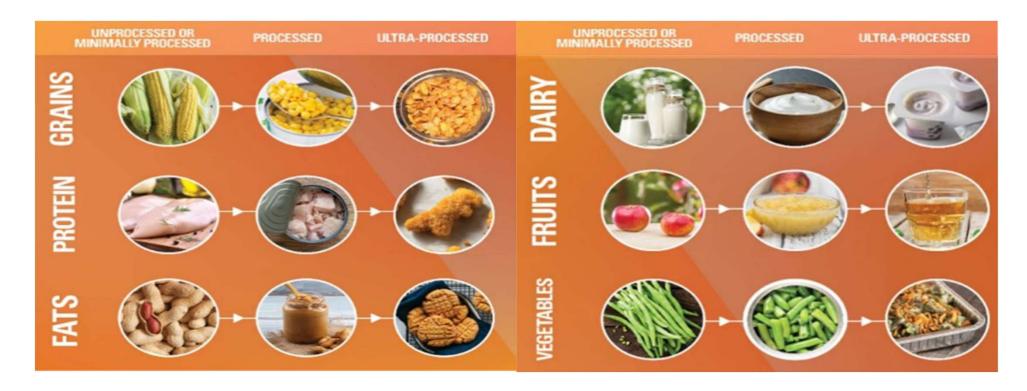
## PROCESSED FOODS CLASSIFICATION SYSTEMS AROUND THE WORLD (COMBINED)

#### Group 2 **Group 1** Group 3 **Group 4** Minimally processed Proc culinary ingred. Min/Mod processed **Ultra-processed** Canned vegetables, The most heavily processed foods often cereals or pulses, nuts are pre-made meals including frozen Vegetables and fruits, dry added with salt or sugar, pizza and microwaveable dinners, grains (cereals), dry beans and plant oils, syrups, honey, salted meats, fish commercial baked goods, prepared other pulses, roots and tubers, spices and salt, sugar, preserved in oil or water frozen meats. Ready-to-eat foods fungi, dried fruits (without corn starch, animal fats. and salt, canned fruits include ketchup, mayonnaise, preservatives) and raw and whole-grain flour, added sugar, cheeses, and margarine, dips, sauces, condiments, roasted (without added oils) concentrating fruit juice to breads. Jarred pasta sauce, crackers, chips, veggie chips/crackers, nuts and seeds, spices in aid storage and transport, salad dressing, plain yogurt granola and deli meat, frozen pizza, general and fresh or dried fermentation of milk to and cake mixes; roasted includes flavored yogurt, cheese, boxed herbs, corn or wheat flours and produce yogurt, or meals, noodles and dry cereals with low Includes nut mixes with oil or salt, fresh or dried pasta, fresh, precooking grains some nutritional bars (Lara, fiber and high sugar. Soft drinks, 'packet canned, dried, chilled or frozen (refined-grain flour or for example). Salted nuts, snacks', ice cream, chocolates, candies, pasta), white or instant fruit canned in syrup, or loaf bread, rolls, cookies, cakes, meats, poultry, fish, seafood, fresh, pasteurized or powdered vegetables canned with 'breakfast cereals' and 'cereal bars', rice, and fruit or milk, eggs, unseasoned meat, added salt, whole-grain 'energy' drinks, mayonnaise, frozen vegetables canned with yogurt (with no added sugar or no additional flavouring products ready for heating (pies, pasta breads, tortillas, crackers, other substance), tea, coffee, or breakfast cereals made dishes and pre-prepared pizzas), steps. from whole-grain flour with drinking water breaded chicken or fish extracts like no added sweeteners or nuggets, sausage, hamburgers, 'instant' fat. soups and noodles.

Food Processing: Comparison of Different Food Classification Systems - PMC (nih.gov)



## WHAT IS THE SPECTRUM OF PROCESSED FOOD?







# INGREDIENTS: WHAT TO LOOK FOR TO EXCLUDE ON THE LABEL

- **Sweeteners:** added sugars and corn syrup, artificial sweeteners (aspartame, sucralose, acelfame K), excessive sugar alcohols, allulose
- Preservatives: BHT/BHA, EDTA, DATEM, polysorbate 80
- **Unhealthy Oils:** "vegetable oil" (rapeseed, cotton seed, soybean, high oleic canola, canola, sunflower, etc.), especially when heated
- Artificial colors/food dyes: yellow 5, 6, Red 40, Blue 1, 2
- Additives: mono & diglycerides, dextrin, MSG, yeast extract, autolyzed yeast extract, carrageenan, cellulose gum, "natural flavors", sodium nitrite, potassium sorbate, titanium dioxide



Creature Creations
Unicorn

Ingredients: Vanilla Ice Cream: Cream, Nonfat Milk, Sugar, Corn Syrup, Contains 2% or less of: Vanilla Extract. Mono and Diglycerides, Locust Bean Gum, Guar Gum, Carrageenan, Annatto (Color); Rainbow Sprinkles: Sugar, Corn Starch, Vegetable Oil (Palm, Palm Kernel), Color Added (Vegetable and Fruit Juice, Paprika Extract, Spirulina Extract, Turmeric Extract, Annatto Extract, Red 40 Lake, Yellow 5 Lake, Yellow 6 Lake, Blue 1 Lake, Red 3, Blue 1, Red 40), Dextrin, Soy Lecithin, Confectioner's Glaze, Carnauba Wax, Natural and Artificial Flavor, Baking Soda: Unicorn Horn Topper: Sugar, Cocoa Butter, Whole Milk Powder, Lactose (Milk), Soy Lecithin, Polyglycerol Polyricinoleate, Natural Flavor, Colors (Red 3, Titanium Dioxide, Blue 1, Yellow 5), Rice Starch, Vegetable Oil (Palm), Skimmed Milk Powder, Non-Hydrogenated Palm Kernel Oil with Soy Lecithin. FOOD BABE





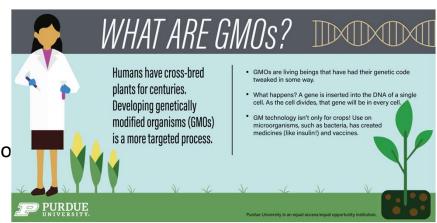
## OTHER INGREDIENTS TO DISCUSS

- Bioengineered products (GMOs):
  - apple, soybean, squash, corn, canola, cotton, potato
- Allulose: naturally occurring sweetener
- Fiber added to products:

o chicory root extract, psyllium, pectin, beta-glucan,

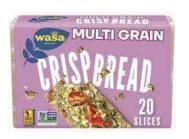
inulin

Amount Per Serving			
Calories 170		Calories	from Fat 110
			% Daily Values'
Total Fat 12g			18%
Saturated Fa	t 8g		40%
Trans Fat 0g			
Cholesterol 0m	g		0%
Sodium 25mg			1%
Total Carbohyd	Irate 19g		6%
Dietary Fiber	2g		8%
Sugars 0g			
Sugar Alcoho	ol 15g		
Protein 2g			4%
Calcium 1%	•		Iron 5%
*Percent Daily Values Values may be higher			
Total Fat	Less than	65g	80g
Sat Fat	Less than	20g	25g
	Less than	300mg	300mg
Social	Less than	2400mg	2400mg
Total Camonydrate		300g	375g
Dietary Fiber		250	30g





## So. what are Healthy Processed Foods (HPF)?





























## IN ADDITION TO THE NUTRITION FACTS LABEL, READ THE INGREDIENT LIST

#### Wheat Bread A

Number of ingredients: 8

#### **Nutrition Facts**

Serving Size 1 slice (48g) Servings Per Container 14

Organic Whole Wheat Flour Water, Oracles Wheat, Wheat Bran, Honey, Molasses, Soybean Oil, Salt and Yeast.

2%

15%

Sodium 45mg Dietary Fiber 4g Sugar 1g

Iron 8%

#### Notes

Ingredients: The first ingredient should always be "whole wheat" or "whole grain" flour. Also, look for brands that contain all food ingredients, very little additives and no high fructose corn syrup or hydrogenated oils.

Nutrition: Choose bread with at least 3 grams of fiber per slice.

#### Wheat Bread B

Number of ingredients: 24

#### **Nutrition Facts**

Serving Size 1 oz (28g) Servings Per Container 20

Enriched Wheat Floar, Water,
Wheat Gluten, High Fructose Corn
Syrup, Honey, Yeast, Contains 29t
or Less of: Vegetable Oil (Soybean
and/or Cottonseed Oils), Brown
Sugar, Salt, Dough Conditioners
(Mono- And Diglycerides, Ethoxylated Mono- and Diglycerides,
Ascorbic Acid, Azodicarbonamide,
Enzymes), Calcium Sulfate, Calcium
Propionate (Preservative), Distilled
Vinegar, Guar Gum, Yeast Nutrients
(Monocalcium Phosphate, Calcium
Sulfate, Ammonium Sulfate), Com
Starch, Soy Lecithin, Soy Flour.

Sodium 135mg Dietary Fiber 2g Sugar 3g

6%

#### Yogurt A

Number of ingredients: 11

#### **Nutrition Facts**

Serving Size 1 container (170g) Servings Per Container 8

Ingredients: Cultured Pasteurized Grade A Low Fat Milk, Sugar, Blackberries, Modified Corn Starch, Kosher Gelatin, Citric Acid, Colored with Beet Juice, Ticalcium Phosphate, Natural Flavor Pectin, Vitamin A Acetate, Vitamin D3.

Protein 5g

Calcium 20%

10%

#### Yogurt B

Number of ingredients: 2

#### **Nutrition Facts**

Serving Size 1 container (170g) Servings Per Container 1

Cultured Grade A Reduced Fat Milk, Pectin.

CONTAINS ACTIVE YOGURT CULTURES INCLUDING L ACIDOPHILUS

Protein 8g 16%

Calcium 30%



- look for products with the fewest number of ingredients
- Foods and beverages that are minimally processed and contain whole food ingredients are the best choice
- When additives replace whole food ingredients, nutrition declines.
- Ingredients listed first are the highest quantity in the product





Good Source of Vitamin C **Nutrition Facts** 

**Group 1** Minimally processed

**Group 2 Processed culinary ingredients** 

**Group 3** Min/Mod processed

Group 4 **Ultra-processed** 









May contain occasional stem, seed or pit fragments.







\*Not a low calorie food. See nutrition panel for sugar and







Fruit Roll-Ups Ingredients: Corn Syrup, Dried Corn Syrup, Sugar, Pear Puree Concentrate, Palm Oil. Contains 2% or less of: Citric Acid, Sodium Citrate, Fruit Pectin, Monoglycerides, Malic Acid, Dextrose, Vitamin C (ascorbic acid), Acetylated Monoglycerides, Natural Flavor, Color (red 40, yellows 5 & 6,

Fruit by the Foot Ingredients: Sugar, Maltodextrin, Corn Syrup, Pear Puree Concentrate, Palm Oil. Contains 2% or less of: Carrageenan, Citric Acid, Monoglycerides, Sodium Citrate, Acetylated Monoglycerides, Malic Acid, Xanthan Gum, Vitamin C (ascorbic acid), Locust Bean Gum, Natural Flavor, Potassium Citrate, Color (yellow 5, red 40, blue 1).

Gushers Ingredients: Sugar, Corn Syrup, Dried Corn Syrup, Modified Corn Starch, Pear Puree Concentrate, Fructose, Maltodextrin, Palm Oil, Glycerin. Contains 2% or less of: Cottonseed Oil, Grape Juice Concentrate, Juice Concentrate, Carrageenan, Citric Acid, Monoglycerides, Sodium Citrate, Malic Acid, Vitamin C (ascorbic acid), Natural Flavor, Potassium Citrate, Agar-Agar, Xanthan Gum, Color (red 40, blue 1, yellows 5 & 6). DIST. BY GENERAL MILLS SALES, INC., MINNEAPOLIS, MN 55440 USA

Dow





Group 1
Minimally processed

Group 2
Processed culinary ingredients

Group 3
Min/Mod processed

## Group 4 Ultra-processed

#### Ingredients

Peanuts.

#### Allergen Info

Contains Peanuts and their derivates. Free from Cereals and Their Derivatives.

#### Disclaime

Actual product packaging and materials may contain additional and/or differer proper usage information than the information displayed on our website. ... Rea

#### **Nutrition Facts**

14.0 About servings per container
Serving size 2 Tbsp (32g)

Amount per serving	
Calories	18
	% Daily value
Total Fat 16g	219
Saturated Fat 2g	109
Trans Fat 0g	09
Polyunsaturated Fat 5g	09
Monounsaturated Fat 8g	09
Cholesterol 0mg	09
Sodium 0mg	09
Total Carbohydrate 5g	29
Dietary Fiber 3g	119
Sugar 2g	09
Added Sugar 0g	09
Protein 8g	09
Calcium	29
Iron	69
Potassium	49

e % Daily Value (DV) tells you how much a nutrient in a riving of food contributes to a daily diet. 2,000 calories a day used for general putrition advice.



#### **Nutrition Facts**

Serving Size 2 Tbsp (32g)

Amount Per Serving

#### Calories 190

9	6 Daily Value
Total Fat 16g	20%
Saturated Fat 3g	14%
Trans Fat 0g	
Cholesterol Omg	0%
Sodium 110mg	5%
Total Carbohydrate	7g <b>2</b> %
Dietary Fiber 3g	10%
Total Sugars 2g	
Incl 0g of Added	Sugars 0%
Protein 8g	8%
Vitamin D 0mcg	0%
Calcium 18mg	2%
Iron 1mg	2%
Potassium 201mg	4%

#### Ingredients

Peanuts, Contains 1% or Less of Salt.

#### **Product Information**

- 8g Protein per Serving\*
- . \*See Nutrition Information f
- Natural
- Gluten Free
- Kosher Pareve
- · Non-GMO Certified by NSF



#### gredients

Made From Roasted Peanuts And Sugar, Contains 2% Or Less Of: Molasses, Fully Hydrogenated Vegetable Oils (Rapeseed And Soybean), Mono And Diglycerides, Salt.

#### Product Information

- 7g Protein Per Serving\*
- \*See No. 15 on Information For Fat And Saturated Fat Content

2 Tbsp (33g)

- · Gluten Free
- · Contains No Artificial Preservatives
- Kcl

#### **Nutrition Facts**

Aller Serving Size

## Amount Per Serving Calories 19

Calories	190
% Daily \	/alue*
Total Fat 16g	21%
Saturated Fat 3.5g	17%
Trans Fat 0g	
Cholesterol Omg	0%
Sodium 140mg	6%
Total Carbohydrate 8g	3%
Dietary Fiber 2g	9%
Total Sugars 3g	
Incl 2g of Added Sugars	496
Protein 7g	7%
Vitamin D 0mcg	0%
Calcium 17mg	2%
Iron 1mg	404

\*The % Daily Value tells you how much a nutrient in a serving of food contributes to a daily diet. 2000 calories a day is used for general nutrition advice.

Potassium 185mg

Vitamin E 2mg





4% 10%



Group 1
Minimally processed

**Group 2 Processed culinary ingredients** 

Group 3
Min/Mod processed

Group 4
<u>Ultra-processed</u>



#### Ingredients:

Ingredients: Grade A Pasteurized Skimmed Milk, Live Active Yogurt Cultures (L. Bulgaricus, S. Thermophilus, L. Acidophilus, Bifidus, L. Casei).



#### **INGREDIENTS**

Grade A Pasteurized Skimmed Milk, Live Active Yogurt Cultures, Strawberries, Water, Cane Sugar, Contains 2% Or Less: Corn Starch, Strawberry Juice Concentrate, Lemon Juice Concentrate, Natural Flavors, Fruit Pectin.

Live Active Yogurt Cultures (L. Bulgaricus, S. Thermophilus, L. Acidophilus, Bifidus, L. Casei)



Cultured Non Fat Milk, Water, Strawberries, Less Than 1%: Natural & Artificial Flavors, Black Carrot Juice & Carmine (For Color), Modified Food Starch, Acesulfame Potassium, Sucralose, Fructose, Malic Acid, Potassium Sorbate (To Maintain Freshness), Active Yogurt Cultures *L. Bulgaricus & S. Thermophilus*.



## WHAT IS THE SPECTRUM OF PROCESSED FOOD?

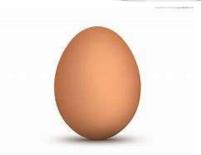
Group 1
Minimally processed

Group 2
Processed culinary ingredients

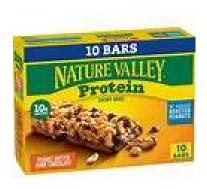
Group 3
Min/Mod processed

Group 4
Ultra-processed











INGREDIENTS: PROTEIN BLEND (MILK PROTEIN ISOLATE, WHEY PROTEIN ISOLATE), POLYDEXTROSE (PREBIOTIC FIBER), WATER, ALMONDS, ERYTHRITOL, PALM KERNEL OIL, SODIUM CASEINATE, GLYCERIN. CONTAINS LESS THAN 2% OF THE FOLLOWING: NATURAL FLAVORS, COCOA POWDER, SALT, RED EDIBLE GLITTER [GUM ARABIC, RADISH JUICE CONCENTRATE (COLOR), CITRIC ACID], LECITHIN (SUNFLOWER AND/OR SOY LECITHIN), SUCRALOSE.

CONTAINS: MILK, ALMONDS, SOY.
PROCESSED IN A FACILITY THAT ALSO
PROCESSES PEANUTS, WHEAT, AND OTHER
TREF NIITS.

CONTAINS A BIOENGINEERED FOOD INGREDIENT.





Group 1
Minimally processed

**Group 2 Processed culinary ingredients** 

Group 3
Min/Mod processed

Group 4
Ultra-processed



















Group 1
Minimally processed

Group 2
Processed culinary ingredients

Group 3
Min/Mod processed

Group 4
Ultra-processed



what people see in eggs



protein & fat

what people should see in eggs



Valine, Leucine, Isoleucine, Cystine, Histidine, Methionine, Tryptophan, Tyrosine, Threonine, Lysine, Phenylalanine, Healthy Fats (DHA and EPA), Retinol (viramin A), Riboflavin, Pantothenic acid, Vitamin B6, Vitamin B12, Folate, Choline, Vitamin D, Vitamin E, Calcium, Potassium, Magnesium, Phosphorus, Iron, Selenim, Zinc, Jodice,









Group 1

Minimally processed

**Group 2 Processed culinary ingredients** 

Group 3
Min/Mod processed

Group 4
Ultra-processed













## EXAMPLE: NUTRITION FACTS <u>AND</u> INGREDIENTS BAKED GOODS

- Sweeteners: added sugars, artificial sweeteners (aspartame, sucralose, acelfame K), monk fruit, excessive sugar alcohols (ending in "tol") or alternatives, corn syrup
- Preservatives: BHT/BHA (linked to cancer in animal studies), EDTA, DATEM, polysorbate 80
- Unhealthy Oils: "vegetable oil" (rapeseed, cotton seed, soybean, high oleic canola, canola, sunflower, etc.), especially when heated
- Artificial colors (yellow 5, 6, Red 40, Blue 1, 2)
- Additives: mono & diglycerides, dextrin, MSG, yeast extract, autolyzed yeast extract), carrageenan (linked to digestive issues and cancer), cellulose gum, "natural flavors", sodium nitrite, potassium sorbate (baked products), titanium dioxide

#### Handmade Italian Tri Color Cookie Tray 1.5 lb

INGREDIENTS FLOUR, SUGAR, WHOLE EGGS, CHOCOLATE COATING (SUGAR, COCOA POWDERS, PARTIALLY PROCESSED WITH ALKALI, PARTIALLY HYDROGENATEDVEGETABLE OILS (MAY CONTAIN ONE OR MORE OF THE FOLLOWING: PALM, PALM KERNEL, SOY) LECITHIN, SALT) VANILLA EXTRACT, SHORTENING, MACARCON PASTE, BUTTER, APRICOT JELLY, EGG YOLK, WATER, VANILLA, EGG SHADE FOOD COLORING, EGG WHITE, GREEN FOOD COLORING, PINK FOOD COLORING,

ALLERGEN STATEMENTCONTAINS EGGS, WHEAT, NUTS, SOY & DAIRY. PRODUCED IN A FACILITY WHERE NUTS AND SEEDS ARE PRESENT

Serving Size 3 cookle (52.8g)			
Servings per Container about	8.5		
Amount per Serving			
Calories 217 Calories from F	at 96		
% Daily Value*			
Total Fat 10.7g	16%		
Saturated Fat 4.5g	23 %		
Trans Fat 0.0g			
Cholesterol 46mg	15%		
Sodium 58mg	2%		
Total Carbohydrate 28.5g	9%		
Dietary Fiber 1.2g	5%		
Sugars 16.7g			
Protein 3.3g			
Vitamin A 3% • Vitamin C	. 0%		
Arrania Com. Arrania C	. 070		

calorie diet. Your daily values may be higher

or lower depending on your catorie needs:







## EXAMPLE: NUTRITION FACTS AND INGREDIENTS WHEN DINING OUT

- Sweeteners: added sugars, artificial sweeteners (aspartame, sucratese, acelfame K), monk fruit, excessive sugar alcohols (ending in "tol") or alternatives, corn syrup
- Preservatives: BHT/BHA (linked to cances in animal studies), EDTA, DATEM, polysorbate 80
- Unhealthy Oils: "vegetable oil" (rapeseed, cotton seed, soybean, high oleic canola, canola, sunflower, etc.), especially when heated
- Artificial colors (yellow 5, 6, Red 40, Blue 1, 2)
- Additives: mono & diglycerides, dextrin, MSG, yeast extract, autolyzed yeast extract), carrageenan (linked to digestive issues and cancer), cellulose gum, "natural flavors", sodium nitrite, potassium sorbate (baked products), titanium dioxide

#### **Detailed Ingredients**

Greens Blend (Romaine Lettuce, Green And Red Leaf Lettuce Blend), Fully Cooked Seasoned Chicken (Chicken Braast Meat With Rib Meat, Water, Rice Starch, Vinegar, Seasoning [Salt, Rice Starch, Potato Starch, Dextrose And Natural Flavor], Sea Salt, Dextrose, Garlic Powder, And Black Pepper), Tomatoes, White Balsamic With Apple Flavored Vinaigrette (Soybean Oil, Water, Sugar, Apple Juice Concentrate, White Balsamic Vinegar, Apple Cider Vinegar, Extra Virgin Olive Oil, Salt, Arabic Gum, Natural Apple Flavor, Gum Acacia, Lemon Juice Concentrate, Xanthan Gum, Dehydrated Onion, Garlic, Rosemary Extract, Green Tea Extract, Ginger, Citric Acid), Bed Ohion, Gorgonzela Cheese Crumbles (Pasteurized Milk, Cheese Culture, Salt, Microbial And Ahmal Enzymes, Penicillium Roqueforti, Powdered Cellulose To Prevent Caking, Natamycin [Mold Inhibitor]), Oil Roasted Pecans (Pecans, Cottonseed Oil), Apple Chips (Apples, Canola Oil, Corn Syrup, Citric Acid)



#### **Fuji Apple Salad with Chicken**

· 560 Cal + Side (180 Cal)







# EXAMPLE: NUTRITION FACTS AND INGREDIENTS CONVENIENCE MEAL

Nutrient	Balanced Meal (all balanced ingredients)	
Total Fat	<25(<33%)	
Saturated Fat	<7gm (<33%)	
Sugar	<17gm	
Sodium	<767mg	
Protein**	25-40gm	
Fiber***	8-10gm	
No artificial sweeteners	Stevia, Monk fruit in small amounts	

Nutrition fact label percentages are based on a 2000 calorie diet.

\*\*Goals for protein based on meeting RDI and does not include activity factor for needs

\*\*\* men up to 50 (30-38 gm/day) vs women (25 gm/day), over 50, men (28 gm/day), women (22 gm/day)

I**ngredients:** Vegetables: Broccoli, Carrots, Corn. Pasta: Water, Durum Sem<mark>òlina</mark> (WHEAT), NIACIN, FERROUS SULFATE (IRON), THIAMINE MONONITRATE, RIBOFLAVIN, FOLIC ACID. GARLIC SAUCE: WATER, CREAM (WATER, EDIBLE VEGETABLE FAT (HYDROGENATED OIL)), LIQUID GLUCOSE, EMULSIFIERS (SODIUM STEAROYL LACTYLATE, MONO AND DIGLYCERIDES, PROPYLENE GLYCOL, XANTHAN GUM SORBITAN MONOSTEARATE), CASEINATE, ACIDITY REGULATORS (SODIUM CITRATE, SODIUM PHOSPHATE), STABILIZERS (MODIFIED FOOD STARCH, GUAR GUM, XANTHAN GUM, HYDROXYPROPYL METHYL CELLULOSE), GARLIC, BUTTER (PASTEURIZED CREAM FROM COW'S MILK, SALT), CORN STARCH, SEASONING POWDER (WHEAT FLOUR, SUGAR, CORN STARCH, SALT, MILK SOLIDS (WHEY POWDER, LACTOSE), DEHYDRATED ONION AND GARLIC POWDER, YEAST EXTRACT, WHITE PEPPER, ACIDIFYING AGENTS (MALIC ACID, CITRIC ACID), XANTHAN GUM, REFINED FLOUR, OLIVE OIL (REFINED OLIVE POMACE OIL, VITAMIN E), SALT, LIMÉ POWDER (DEXTROSE, LIME POWDER), BLACK PEPPER, DRY PARSLEY, OREGANO, XANTHAN GUM). FULLY COOKED ITALIAN STYLE DICED CHICKEN WITH RIB MEAT CARAMEL COLOR ADDED: BONELESS, SKINLESS, CHICKEN BREAST WITH RIB MEAT, WATER, SEASONING (MODIFIED FOOD STARCH, ROMANO CHEESE [SKIM COW'S MILK, CHEESE CULTURE, SALT, ENZYMES), SUGAR, DEHYDRATED GARLIC, DEHYDRATED ONION, NATURAL FLAVOR, SALT, SODIUM PHOSPHATES), SEASONING (SALT, CORN FLOUR, MALT DEXTRIN, CORN STARCH, PAPRIKA, DEFATTED SOY FLOUR, SPICES, BAKING POWDER [SODIUM BICARBONATE, CORN STARCH, SODIUM ALUMINUM SULFATE, CALCIUM SULFATE, MONO CALCIUM SULFATEI, CARAMEL COLOR, EXTRACTIVE OF PAPRIKA).



## **Nutrition Facts**

3 servings per container

Serving size

1 cup (198g)

Calories	_	erving <b>90</b>	Fer cont	ainer 70
		% DV∗		% DV*
Total Fat	3.5g	5%	11g	17%
Saturated Fat	1.5g	8%	4.5g	23%
Trans Fat	0g		0g	0.000
Cholesterol	15mg	5%	45mg	15%
Sodium	400mg	17%	1200mg	50%
Total Carbohydrate	29g	10%	87g	29%
Dietary Fiber	4g	16%	12g	48%
Total Sugars	1g		3g	
Incl. Added Sugars	0g	0%	0g	0%
Protein	11g	$\geq$	33g	
Vitamin D	0mcg	0%	0mcg	0%
Calcium	140mg	11%	420mg	33%
Iron	1.0mg	6%	3.0mg	17%
Potassium	260mg	6%	780mg	18%

<sup>\*</sup> The % Daily Value (DV) tells you how much a nutrient in a serving of food







### **EXAMPLE:** CONVENIENCE MEAL UPGRADE!

1 serving skillet meal plus
½ serving nuts
5.3 ounces Fage 0%
1 cup frozen
blueberries



Nutrient	Balanced Meal (all balanced ingredients)	
Total Fat	<25(<33%)	
Saturated Fat	<7gm (<33%)	
Sugar	<17gm	
Sodium	<767mg	
Protein**	25-40gm	
Fiber***	8-10gm	
No artificial sweeteners	Stevia, Monk fruit in small amounts	

Nutrition fact label percentages are based on a 2000 calorie diet.

\*\*Goals for protein based on meeting RDI and does not include activity factor for needs

\*\*\* men up to 50 (30-38 gm/day) vs women (25 gm/day), over 50, men (28 gm/day), women (22 gm/day)







<b>Nutrition Facts</b>			
1 serving			
Serving size	1 meal		
Amount per serving			
Calories	413		
	% Daly Value		
Total Fat 14g	229		
Saturated Fat 4.5g	23		
Trans Fat Og			
Cholesterol 22g	75		
Sodium 693g	299		
Total Carbohydrate 51g	179		
Dietary Fiber 9g	369		
Total sugars 17g			
Includes Og Added Suga	ors 09		
Protein 25g			
Vitamin D			
Calcium	24g 249		
Iron	6g 6%		
11011	260g		



advice.



# EXAMPLE: NUTRITION FACTS AND INGREDIENTS HEALTHY CONVENIENCE MEAL

Nutrient	Balanced Meal (all balanced ingredients)
Total Fat	<25(<33%)
Saturated Fat	<7gm (<33%)
Sugar	<17gm
Sodium	<767mg
Protein**	25-40gm
Fiber***	8-10gm
No artificial sweeteners	Stevia, Monk froit in small amounts

Nutrition fact label percentages are based on a 2000 calorie diet.

gm/day), women (22 gm/day)

#### INGREDIENTS

filtered water, organic rice, organic pinto beans, organic com tortillas (organic white corn. water. trace of lime), organic tomato purée, organic corn, organic onions, organic zucchini, organic bell peppers, organic tofu (filtered water, organic soybeans, magnesium chloride), organic black beans, expeller pressed high oleic safflower and/or sunflower oil, organic sweet rice flour, spices, sea salt, organic tapioca starch, olives, organic garlic, organic green chies, chives. contains soy.



## **Nutrition Facts**

1 serving per container Serving size

1 tray (283g)

Amount per serving

#### **Calories**

360

Odiorics	000
9	Daily Value*
Total Fat 9g	12%
Saturated Fat 1g	5%
Trans Fat 0g	
Cholesterol 0mg	0%
Sodium 820mg	36%
Total Carbohydrate 57g	21%
Dietary Fiber 7g	25%
Total Sugars 4g	
Includes 0g Added Sugars	0%
Protein 12g	18%
Vitamin D 0mcg 0% • Calcium 12	0mg 10%

\*The % Daily Value tells you how much a nutrient in a serving of food contributes to a daily diet. 2,000 calories a day is used for general nutrition advice.

20% • Potassium 650mg



Iron 3.2mg



<sup>\*\*</sup>Goals for protein based on meeting RDI and does not include activity factor for needs

\*\*\* men up to 50 (30-38 gm/day) vs women (25 gm/day), over 50, men (28

## **EXAMPLE: HEALTHY CONVENIENCE MEAL UPGRADE!**

1 serving enchilada meal plus

1 serving vegetables

2.75 ounces Fage 0%

A	BNCHILLADA
A A S	MADE WITH ORGANIC BLACK BEANS, RICE & VEGETABLES
Any	ENCHILADA.
	WITH SPANISH RICE & BEANS -
4	PLANT
-	
6	
G.	
DAIRY FR	FE REF

Nutrient	Balanced Meal (all balanced ingredients)	
Total Fat	<25(<33%)	
Saturated Fat	<7gm (<33%)	
Sugar	<17gm	
Sodium	<767mg	
Protein**	25-40gm	
Fiber***	8-10gm	
No artificial sweeteners	Stevia, Monk fruit in small amounts	

Nutrition fact label percentages are based on a 2000 calorie diet.

\*\*\*Goals for protein based on meeting RDI and does not include activity factor for needs

\*\*\* men up to 50 (30-38 gm/day) vs women (25 gm/day), over 50, men (28 gm/day), women (22 gm/day)





<b>Nutrition Facts</b>			
1 serving	3		
Serving	size	1 meal	
Amount p	er serving		
Calori	es	430	
		% Daly Value*	
Total Fa	it 9g	14%	
Satura	ted Fat 1g	5%	
Trans	Fat Og		
Cholest	<b>erol</b> 5g	2%	
Sodium	858g	35%	
Total Ca	arbohydrate 66g	22%	
Dietar	y Fiber 8g	32%	
Total	sugars 7g		
Incl	udes Og Added Su	igars 0%	
Protein	21g		
Vitamin	D		
Calcium		18g 18%	
Iron		20g 20%	
Potassiu	m	765g	



advice.

2000 calories a day is used for general nutrition



## >65% PROCESSED FOODS MEAL DAY

Breakfast (160 calories)



Lunch (1250 calories)



Midday snack (813 calories)



Pre-dinner snack (80 calories)



Dinner (1000 calories)



**Goal: 2100 calories** 

Total: 3303 calories





## <40% PROCESSED FOODS PREPPED MEAL DAY

Breakfast (344 calories)



Lunch (485 calories)



Midday Snack (300 calories)



**Dinner**(500 calories)



Dessert(300 calories)



**Goal: 2100 calories** 







## >65% PROCESSED FOODS MEAL DAY

Breakfast (160 calories)



Lunch (260 calories)



Midday snack (300 calories)







Pre-dinner snack (300 calories)

**Dinner** (900 calories)

Evening snack (170 calories)







Goal: 1700

calories







## <40% PROCESSED FOODS PREPPED MEAL DAY

**Breakfast** (195 calories)



Lunch (415 calories)



Midday Snack(300



Lunch (500 calories)



Dessert(300 calories)



Goal: 1700 calories



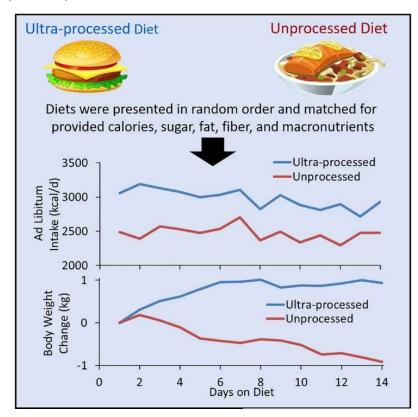




## THE BENEFITS OF MINDFUL INTAKES OF ULTRA-PROCESSED FOODS (UPF) IN YOUR DIET

- ☐ Reduces high density of calories from UPF
- ☐ Increased fullness factor/satiety
- ☐ Reduced overconsumption due to attractiveness of UPF
- ☐ Increase in natural dietary fiber
- ☐ Lower intakes of sodium, added fats and preservatives
- ☐ Increases the digestive tasks that demands energy from the body\*

<sup>\*</sup>In a study, overweight people gained one kilogram only due to the level of processing after consuming UPF for two weeks, while the control group, which consumed minimally processed foods with identical nutrient composition, lost one kilogram.

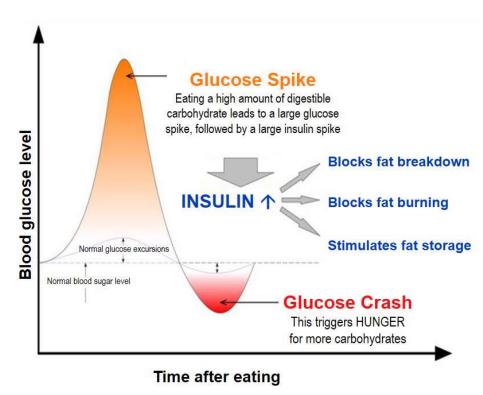






## SNACKING AFTER AN UNSATISFYING MEAL

- Carbohydrates are responsible for the increase in blood sugar.
- Shortly after eating foods containing carbohydrates, the blood sugar level rises because glucose is transferred from the food into the blood.
- Subsequently, the release of insulin is stimulated. Insulin
  influences glucose and fat metabolism in many different ways
  and ensures that the sugar in the blood is absorbed by the body
  cells
- As a result, the blood sugar level drops again. However, if it drops too much, we get ravenous appetite for carbohydrates and the cycle starts all over again.
- Balancing out the type of carbohydrates consumed (lower glycemic index, generally least processed and higher in fiber) and pairing with protein and healthy fats will mitigate this reaction.









## THE SCIENCE OF SNACKING

## **Pitfalls**

- •Unwanted weight gain if portions or frequency of snacking is too much, adding excess calories.
- •Too much snacking can reduce hunger at mealtimes or cause one to skip a meal entirely, which increases the risk of losing out on important nutrients. Boredom, stress, and environmental factors may introduce snacking as a habit that is used for coping,
- •Regular intake of ultra-processed hyperpalatable snacks that contain added salt, sugar, and fats but that are low in nutrients and high in calories can increase a preference for these types of foods, leading to a change in eating behaviors and diet quality (e.g., a higher intake of hyperpalatable snacks along with a decreased intake of healthful foods).







## THE SCIENCE OF SNACKING

## **Benefits**

- •Provides a boost of energy if several hours pass between meals and blood glucose levels drop.
- •Helps curb your appetite to prevent overeating at the next meal.
- •Provides extra nutrients when choosing certain snacks like *least processed* fresh fruit, lean proteins and healthy fats.
- •Can help maintain adequate nutrition if one has a poor appetite but cannot eat full meals, such as due to an illness.

#### ARE YOU AT A METABOLIC ROADBLOCK?

## Steps to Healthy Ingredients/Meals

#### Plan:

- Cook more foods at home; assemble foods into meals; diet quality will improve
- Design meals around whole foods in diet vs relying on chance for your food choices
- Find recipes and brush up on your cooking skills online

#### Read Food Labels:

- Know exactly what is in a processed food
- Choose products without a lot of sodium, added sugars, and saturated fats.
- Look for the least amount of ingredients and other additives (see list earlier).

#### Reduce UPF:

- How often do you eat the processed food choices? What percent or occurrences fit in your diet?
- Start by evaluating the most frequently consumed foods and then go from there to make simple swaps.



#### ARE YOU AT A METABOLIC ROADBLOCK?

## Steps to Healthy Ingredients/Meals

## Enjoy Frozen and Canned Produce:

- Convenient and affordable options; can be just as nutritious as fresh produce.
- Look for varieties without salty sauces and sugary syrups.
- Compare the labels and choose items with the lowest amounts of sodium and other additives (preservatives).
- Add these to a convenience meal to help elevate your nutrient density in your meals.

### Enjoy Snacks smarter:

- Mini meals (with protein, fiber rich veggies and small amount of healthy fat) can be a great snack
- Use crunchy unsalted nuts and seeds (small portions), cut-up veggies, fruits (hits the sweet spot) for snacks
- Package healthy snacks in small containers and they're just as convenient as that bag of chips
- Ask yourself when you are hungry for a snack, "do I want a plate of veggies?". Are you really hungry or just feeling "snacky"?





(Quad Med

#### ARE YOU AT A METABOLIC ROADBLOCK?

## Steps to Healthy Ingredients/Meals

### Drink water:

- reassess your caffeine intakes
- Alleviate the need for the hyperpalatable artificially sweetened or sugar filled coffees and sodas as your hydration.
- Add some fruit juice (orange, lemon or lime), mottled fruit or slices of cucumber and mint to water to infuse some flavors.
- Sparkling water is a great alternative to sodas

#### Eat balanced meals:

- If you reach for a snack before lunch or dinner, that may be a signal that your breakfast, lunch or both is not filling enough or balanced.
- Assess your protein in your meals. Increase your protein if you already eat a breakfast like oats or toast. You will benefit to add Greek yogurt or eggs.







