

# Food Product Analysis Tool Kit

## Nutrition Facts Label Math


- **% Calories from Fat** = Calories from Fat ÷ Total Calories (30% or less is recommended)
- **Complex Carbohydrates** (i.e. Other Carbohydrates) = Total Carbohydrates (g) - (sugars (g) + fiber (g)) (50% or greater is recommended)
- **% Daily Values** are to add up to 100% for the day
- 1g **protein** or **CHO** = 4 C; 1g **fat** = 9 C

## Ingredients List Information

- Listed in order by weight (most to least)
- Potential **allergens identified by the food company** are typically bolded/italicized at the end of or beneath the ingredients list
- Can be used to determine if the product likely contains **GMO's** (e.g. soybean, corn, cotton, canola, wheat, etc. and the derivatives from said crops)
- It can identify **hidden sugars** and **trans fats**...the nutrition facts label may be misleading regarding these nutrients
- **Food Additives**—substances added to food intentionally to produce a desired effect:
  - Maintain texture (e.g. gums, waxes, gelatins; *hydrogenated* = trans fat!)
  - Increase nutrient content (e.g. vitamins, minerals, protein)
  - Lengthen the storage life (e.g. preservatives, MSG, BHT)
  - Give flavor or color (e.g. natural flavor, Red 4)
  - Control food's acidity (e.g. alkali)
  - Help age food

## Ingredients Derived from Corn

- |                         |                              |                   |
|-------------------------|------------------------------|-------------------|
| • Alpha tocopherol      | • Ethyl lactate              | • Saccharin       |
| • Ascorbic acid         | • Fibersol-2                 | • Semolina        |
| • Baking powder         | • Fructose                   | • Sorbic Acid     |
| • Calcium stearate      | • Fumaric acid               | • Sorbitol        |
| • Caramel               | • Gluten                     | • Starch          |
| • Cellulose             | • Golden syrup               | • Sucrose         |
| • Citric Acid           | • High fructose corn syrup   | • Treacle         |
| • Citrus cloud emulsion | • Inositol                   | • Vanilla extract |
| • Corn flour            | • Invert sugar               | • White vinegar   |
| • Corn oil              | • Malt                       | • Xanthan gum     |
| • Cornstarch            | • Maltodextrin               | • Xylitol         |
| • Corn syrup            | • Margarine                  | • Zein            |
| • Dextrin               | • Monoglycerides             |                   |
| • Dextrose (glucose)    | • Polydextrose               |                   |
| • Diglycerides          | • Monosodium glutamate (MSG) |                   |
| • Ethylene              |                              |                   |
| • Ethyl acetate         |                              |                   |





Approximately 90% of the corn grown in the US is **genetically modified**

## 46 names for added sugars

USED IN PROCESSED FOODS AND BEVERAGES:

- |                          |   |                     |
|--------------------------|---|---------------------|
| 1. Agave                 | 17. Diastase                            | 32. Lactose         |
| 2. Barley malt           | 18. Date sugar                          | 33. Maltodextrin    |
| 3. Beet sugar            | 19. Dextrin                             | 34. Maltose         |
| 4. Blackstrap molasses   | 20. Dextrose                            | 35. Maple syrup     |
| 5. Brown sugar           | 21. Diastatic malt                      | 36. Palm sugar      |
| 6. Brown rice syrup      | 22. Evaporated cane juice               | 37. Raw sugar       |
| 7. Cane sugar            | 23. Fructose (High fructose corn syrup) | 38. Rice syrup      |
| 8. Cane juice            | 24. Fruit sugar                         | 39. Refiner's syrup |
| 9. Caramel               | 25. Galactose                           | 40. Saccharose      |
| 10. Carob syrup          | 26. Glucomalt                           | 41. Sorghum syrup   |
| 11. Coconut sugar        | 27. Glucose                             | 42. HSucrose        |
| 12. Coconut palm sugar   | 28. Grape juice concentrate             | 43. Sugar           |
| 13. Confectioner's sugar | 29. Grape sugar                         | 44. Treacle         |
| 14. Corn sweetener       | 30. Honey                               | 45. Turbinado Sugar |
| 15. Corn syrup           | 31. Invert Sugar                        | 46. Xylose          |

**INGREDIENTS:** ENRICHED FLOUR (WHEAT FLOUR, NIACIN, REDUCED IRON, THIAMIN MONONITRATE [VITAMIN B<sub>1</sub>], RIBOFLAVIN [VITAMIN B<sub>2</sub>], FOLIC ACID), CORN SYRUP, SUGAR, SOYBEAN AND PALM OIL (WITH TBHQ FOR FRESHNESS), CORN SYRUP SOLIDS, DEXTROSE, HIGH FRUCTOSE CORN SYRUP, FRUCTOSE, GLYCERIN, CONTAINS 2% OR LESS OF COCOA (PROCESSED WITH ALKALI), POLYDEXTROSE, MODIFIED CORN STARCH, SALT, DRIED CREAM, CALCIUM CARBONATE, CORNSTARCH, LEAVENING (BAKING SODA, SODIUM ACID PYROPHOSPHATE, MONOCALCIUM PHOSPHATE, CALCIUM SULFATE), DISTILLED MONOGLYCERIDES, HYDROGENATED PALM KERNEL OIL, SODIUM STEAROYL LACTYLATE, GELATIN, COLOR ADDED, SOY LECITHIN, DATEM, NATURAL AND ARTIFICIAL FLAVOR, VANILLA EXTRACT, CARNAUBA WAX, XANTHAN GUM, VITAMIN A PALMITATE, YELLOW #5 LAKE, RED #40 LAKE, CARAMEL COLOR, NIACINAMIDE, BLUE #2 LAKE, REDUCED IRON, YELLOW #6 LAKE, PYRIDOXINE HYDROCHLORIDE (VITAMIN B<sub>6</sub>), RIBOFLAVIN (VITAMIN B<sub>2</sub>), THIAMIN HYDROCHLORIDE (VITAMIN B<sub>1</sub>), CITRIC ACID, FOLIC ACID, RED #40, YELLOW #5, YELLOW #6, BLUE #2, BLUE #1.

Green=probable GMO; Yellow=Added Nutrients; Blue=Color; Red=Texture; Purple=Preservative; Orange=Controls Acidity; Pink=Flavor; =Trans Fat; =Hidden Sugar

### Food Package Claims and Labels – Defined by the USDA

- **Fresh**—the food is raw, unprocessed, contains no preservatives and has never been frozen or heated
- **Light**—calories have been reduced by at least 1/3, or the fat or sodium by at least ½
- **Less**—the food contains 25% less of a nutrient or of calories than a comparable food
- **-Free**—product contains no amount, or only trace amounts, of fat, cholesterol, sodium, sugars or calories
- **Healthy**—low in fat, saturated fat and limited amounts of cholesterol and sodium
- **Natural**—minimally processed with no artificial or synthetic ingredients; natural does not mean organic
- **Organic**—no growth hormone/antibiotics used, produced without using most conventional pesticides, fertilizers with synthetic ingredients or sewage sludge, bio-engineering (GMO), or ionizing radiation
- **Gluten-Free**—proteins formed when white, rye, barley and/or crossbred hybrids of such grain flours are mixed with fluids and physically manipulated
- **Trans Fat**—chemically/enzymatically hydrogenated unsaturated fats; rarely occurring naturally
- **GMO**—genetically modified organism; an organism whose genetic material has been altered to achieve a particular goal or desired effect

