

Health & Wellness

December
2025

Issue 15

Food Additives

This month's Health & Wellness topic is **Food Additives**. For this issue, we're going to go over the types of additives and what they are used for, as well as how the food additives are assessed for potentially harmful effects.

Contents:

Health & Wellness Education
pg.2

Brain Boosters
pg.8

Our Picks of the Month
pg.10

Brain Booster Answers
pg.11

Providing Meals and More...



DuPage Senior
Citizens Council



Kane Senior
Council

Food Additives



Introduction

Food additives are substances added to **processed foods**, or other foods produced on an **industrial scale**, for **technical purposes** such as to **improve safety**, increase the amount of time a food can be **stored**, or modify **sensory properties** of food.

It is important to note that food additives are **assessed** for potentially harmful effects on human health before they are approved for use.

Information adapted from:

www.who.int/news-room/fact-sheets/detail/food-additives

Food Additives

Food additives are **substances** that are **not normally consumed** as a food **by themselves** and **not normally used** as an **ingredient** in food.

Most foods that are **not processed** (or minimally processed) do **not** contain food additives.

Many different food additives have been **developed** over time to meet the needs of **large-scale** food processing.

Additives are used to ensure processed food remains **safe** and in **good condition** from factories or industrial kitchens, to warehouse and shops, and finally to consumers.

Additives are also used to modify the **sensory properties** of foods including taste, smell, texture, and appearance.

Food additives can be **derived** from plants, animals, or minerals, or they can be chemically synthesized.

There are several thousand food additives and all are designed to do a specific job.

Food Additives can be grouped into

3 Broad Categories based on their function

Flavoring Agents

Chemicals that impart flavors or fragrances and are added to food to modify their aroma or taste.

They are the most common type of additives used in foods, with hundreds of varieties used in a wide variety of foods, from confectionary and soft drinks to cereal, cake, and yogurt.

Flavoring agents can be **extracted** from **naturally occurring sources** or **chemically synthesized** ones.

Flavors extracted **directly** from naturally occurring sources are often referred to as **natural flavors**.

Sometimes referred to as **nature made** or **nature identical** to indicate that although the flavor molecule itself is naturally occurring it hasn't been extracted from its source, but synthesized to be identical.

Artificial flavoring agents are chemicals that do not exist in nature but are synthesized to imitate natural flavors or elicit other taste sensations.

Enzyme Preparations

A type of additive that may or may not end up in the final food product.

Naturally occurring proteins that boost **biochemical reactions** by breaking down larger molecules into **smaller building blocks**

Can be obtained by **extraction** from:

- **Plants**
- **Animal Products**
- **Mirco-organisms** such as bacteria

Mainly used in:

- baking (i.e. improve the dough)
- manufacturing fruit juices (i.e. increase yields)
- wine making and brewing (i.e. improve fermentation)
- cheese manufacturing (i.e. improve curd formation)

Other Food Additives

Used for a variety of reasons, such as **preservation**, **coloring**, and **sweetening**.

They are added when food is prepared, packaged, transported, or stored, and they eventually become a **component** of the food.

Preservatives can slow decomposition caused by mold, air, bacteria or yeast. In addition to maintaining the quality of the food, preservatives help control contamination that can cause foodborne illness, including life-threatening botulism.

Coloring is added to food to replace colors lost during processing or other production, or to make food appear more attractive.

Non-sugar sweeteners are often used as an alternative to sugar because they contribute fewer or no calories when added to food.

Food Safety

**Joint FAO/WHO
Expert
Committee on
Food Additives
(JECFA)**

The international body responsible for evaluating the safety of food additives for use in foods that are traded internationally

An estimate of the amount of an additive in food or drinking water that can be safely consumed daily over a lifetime without adverse health effects.

**Acceptable
Daily Intake
(ADI)**

Food additives are **assessed** for potential harmful effects on human health before they are **approved** for use.

Authoritative bodies at the national, regional, and international levels are responsible for evaluating the safety of food additives.

The starting point for determining whether a food additive can be used without having harmful effects is to establish the ADI.

Once a food additive has been found to be safe for use, national food regulations will be implemented permitting the actual use of a food additive.

Health & Wellness Education

WRAP UP

More than 10,000 food additives are allowed in the U.S.

...which includes substances that are intentionally added to food, color additives, and chemicals that migrate from packaging.

For more health and wellness tips, information and resources, visit our website.



BRAIN BOOSTERS

SUDOKU

		3	6		5	4	8	7
7			2				3	6
4			1	3	7		2	
		2						
	3	1				6	9	
						5		
	4		9	5	6			3
6	9				1			4
3	1	5	4		2	7		

© 2013 KrazyDad.com

Fill in the blank squares so that each row, each column and each 3-by-3 block contain all of the digits 1 thru 9.

RIDDLE OF THE MONTH

I am from the month of December. I am not a holiday. I am the only month that has this.

What am I?

WORD SEARCH

P	R	E	S	E	R	V	A	T	I	V	E	S	O
P	S	J	E	Y	Z	S	A	F	E	T	Y	F	J
R	R	E	G	U	L	A	T	I	O	N	S	L	X
O	W	N	T	M	T	W	V	D	B	H	W	A	F
C	K	L	S	P	L	I	Q	Z	D	F	Z	V	D
E	X	C	O	L	O	R	I	N	G	F	T	O	A
S	A	W	S	U	B	S	T	A	N	C	E	R	M
S	L	W	S	U	C	P	X	M	D	E	Y	I	M
E	U	V	X	Q	W	G	L	J	A	N	U	N	B
D	O	N	H	Q	H	C	L	X	X	Z	Y	G	V
I	A	D	D	I	T	I	V	E	S	Y	Y	W	J
S	B	V	Y	V	R	G	J	V	I	M	M	S	F
M	L	L	X	M	Y	Z	Y	Q	E	E	W	K	L
S	W	E	E	T	E	N	E	R	S	U	D	H	K

WORD BANK

Processed

Flavoring

Coloring

Safety

Additives

Enzyme

Sweeteners

Regulations

Substance

Preservatives



Our Picks of the Month

December Recipe: Italian Stuffed Peppers

Recipe from: "A Place for Mom"

Ingredients:

- 4-6 bell peppers
- 1 cup frozen spinach
- 1 pound ground Italian sausage or ground beef
- 1 tbsp Italian seasoning
- 1 (15 oz) jar or can of tomato sauce
- 1 cup cooked quinoa, wild rice, or whole grain of your choice
- ½ cup shredded low-fat mozzarella



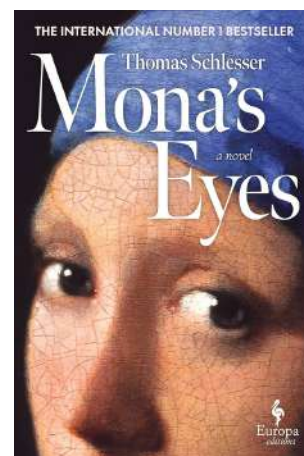
Directions:

1. Preheat oven to 350° F and grease an 8-inch glass baking dish or casserole.
2. Cut the tops from peppers, scoop out seeds, and rinse.
3. In a medium skillet, cook beef or sausage about 10 minutes, or until browned. Remove from heat and drain the meat, then return to pan.
4. Stir grains, 1 cup of the tomato sauce, spinach, and seasonings into the cooked meat.
5. Nestle peppers, standing up, into the baking dish. Stuff them with the meat, grain, and spinach mixture until full.
6. Pour remaining tomato sauce over the peppers and top with shredded mozzarella. Cover the baking dish tightly with aluminum foil.
7. Bake 20 minutes covered. After 20 minutes, remove the foil and bake about 10 minutes longer until cheese is melted and bubbly.

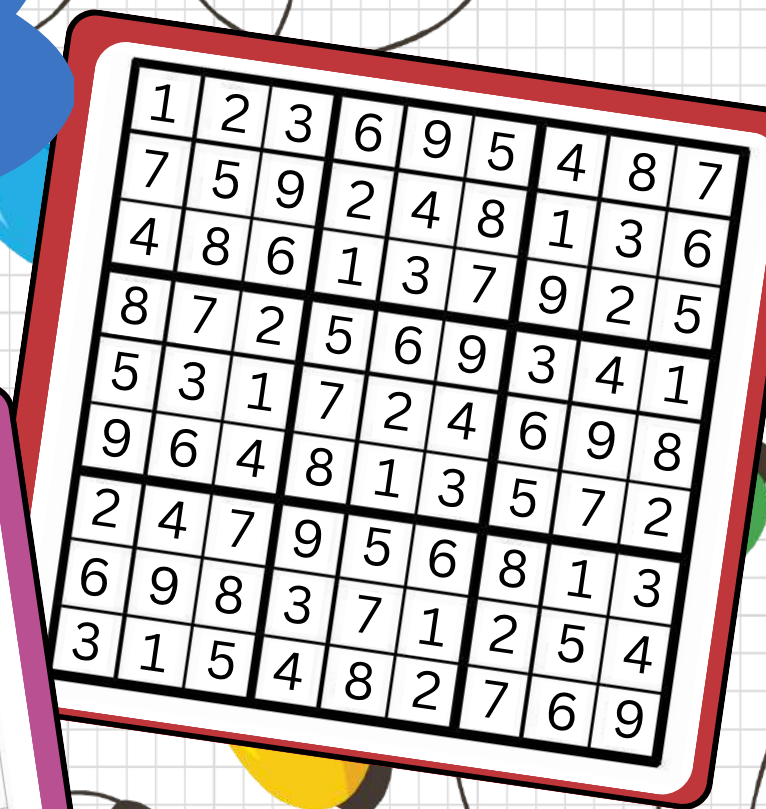
Our Book Pick of the Month

Mona's Eyes by Thomas Schlessler

A 10-year old girl and her grandfather visit the most famous works of art in Paris museums over the course of a year before she loses her eyesight.



ANSWER KEY



Riddle Answer:

*I am from the month of December. I am not a holiday.
I am the only month that has this. What am I?*

Answer: The Letter "D"

Print Monthly Meal Menus at:

www.DuPageSeniorCouncil.org/Home-Delivered-Meals-Menus

www.KaneSeniorCouncil.org/Meals-On-Wheels



**DuPage Senior
Citizens Council**



**Kane Senior
Council**

Providing Meals and More...



DuPage Senior Citizens Council

1990 Springer Dr. Lombard, IL 60148

630-620-0804

www.DuPageSeniorCouncil.org

Kane Senior Council

418-B Airport Rd. Elgin, IL 60123

630-338-0999

www.KaneSeniorCouncil.org