

food additives



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WHAT ARE ADDITIVES?

- ❖ Additives are resources which are added to food products to make them last longer, to make them look fresh, taste and smell.
- ❖ They can be from different types of chemistry origin, composition and they affect physical and chemical.
- ❖ They are added to food products while they are producing, during processing, preparation, packing but also in transport and keeping.

- Food additives are commonly added to food to:
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- Increase shelf life
 - Enhance flavors
 - Reduce the cost of the food item
 - Stabilize a product during treatment
 - Change the food texture



WHAT IS GOAL OF ADDITIVES?

- Kepping nutritrional value.
- Improvrming look of the food
- Better can servation quality and food stability
- Easy processing processes.



Chemically, additives can be of natural or synthetic origin.

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Additives of natural origin are substances that are found in nature (kitchen salt, ascorbic acid,...) and complex substances that are obtained by extracting from certain foods (*proteins from soy, beta-carotene, pectin, enzymes, gelatin,, carob seeds, agar, ...*)

2. Additives of synthetic origin are used for coloring and preserving foods of animal origin.



■ TYPES OF ADDITIVES ACCORDING TO PURPOSE

1. Preservatives
2. Antioxidants and antioxidant synergists
3. Flavors
4. Flavor enhancers
5. Emulsifiers, Stabilizers, Binding and thickening agents and Gelling agents
6. Food colors
7. Spices
8. Biologically active substances - Enzyme preparations
9. Agents for sweetening
10. Aids in production

What are the functions of food additives?

- Colors - to restore or intensify color in food lost during preparation or storage, as it helps to preserve food; Preservatives - extend the shelf life of food, protect it from deterioration or poisoning caused by M.O. (bacteria, molds, yeasts,...); Antioxidants - extend the shelf life of foods, protect them from deterioration caused by air (oxidation), e.g. unpleasant smells, discoloration of fresh fruits and vegetables, ...; Emulsifiers - enable the formation or maintenance of homogeneous mixtures of two or more incompatible phases.
- Thickeners - increase the viscosity of food, form and maintain the desired consistency of the food product; Stabilizers - maintain a homogeneous dispersion of the substance in the food, stabilize and intensify the color; Sweeteners - sugar-free substances used to give food a sweet taste, are not processed by the human body and have almost no energy value; Gases for food packaging - change the air in the closed package

: Good E additives are

- E101, vitamin B1 E160, carotene, vitamin A E300 – E304 vitamin C E306 – E309 vitamin E Emulsifier E322 lecithin Stabilizer E375 niacin i E440 pectin

- PROBLEMATIC:

- E252 Potassium nitrate
E251 Sodium nitrate
E250 Sodium nitrite
E249 Potassium nitrate

Bad additives are: Colors

E100 – E180 Preservatives

E200 – E285, E1105 (dried fruit - allergen) Antioxidants

E300 – E321 Stabilizers, thickeners E322 – E495

(sweets, soups) Flavor enhancer E901 – E926

(better gloss, glaze)

Sweeteners E420 - E421 and

E953 - E959 (substitute for sugar)

Food that has an intense red color definitely contains carcinogenic additives.

Always read the label!!!

- Regardless of the presence of E numbers and information about them, it is useful to know some values that are desirable and undesirable to be found in the foods we consume every day.

	A LOT	LITTLE
mass	20 g or more	3 g or little
	5 g or more	1 g or little
Table salt	1,25 g or more	0,25 g or little