



ORIGINAL RESEARCH PAPER

Medical Science

HARMFUL COLOUR IN GUJARATI FOOD : A PUBLIC AWARENESS ARTICLE

KEY WORDS: Artificial food colouring, food and drug department, deleterious effect, Gujarati food product. Accepted daily intake limit.

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ABSTRACT

Many of food are yummy and attractive but dangerous to our health due to their artificial colour. The food safety and standards authority of India has prescribed, accepted daily intake limit of 100mg/Kg. but half of the Gujarati food products exceeded this limit. Our breakfast, tomato ketchup, fruit juice, soft drink etc. are loaded with synthetic colours. These colours must be purified up to food grade but that may or may not be in Gujarati food. Impurities have a deleterious effect on our health and are also carcinogenic in nature. Even some the non-permitted colours are used by local food production. Types of colours and its permitted limit with our popular food items are discussed. There are more governing bodies for food colouring regulation like food & drug departments for state local governing bodies like Municipal Corporation But due to lake of our system and huge number to look after, It is almost impossible to find out and to punish guilty. Artificial food colouring was originally manufactured from coal tar, now those are from petroleum. Final products are rigorously tested to make sure they contain no traces of the original petroleum.

INTRODUCTION:

Haven't we ever wondered, why every glass of pure premium orange juice of specific brand have exactly same colour, no matter where in the world you buy if or what time of the year you have purchaed it.

ketchup and different types of sauces. Culinary paste, Dehydrated or frozen fruits and vegetables, Jam/Jelly/ marmalades etc.

I do mean we are living in ocean of artificial food colour Fssci has published 126 pages Guidance document for food safety management system in March 2019.

We can apply same logic to beverages, different types of

BREAKFAST			
1	Tea	Gallic Acid, Sudan (at local level permitted colour) and	non-Carcinogenicity
2	Coffee	Suffice ammonic caramel	Allergic reactions *It can be used as natural dyes.
3	Fruit juice	Citrus rake – 2 Orange B Carmoisine	Carcinogenicity, nontoxicity and hyper sensitivity.
4	Bread	Tartrazine Erythrosine Dark chocolate & coffee brown	Blended colours.
5	Butter	Yellow II 6	Adrenal and testicular tumours in animals. hypersensitivity.
6	Biscuits	Ammonia caramel plain caramel Quinolone yellow etc.	Allergic reactions, hyperactivity in children.
7	Tomato Ketch up	Red II 40 (Allure Red)	Asthma, eczema, urticarial angioedema.
8	Toss	Beta carotenes carotenoids, marigold encodes, Marigold, extract, Annatto.	Perennial rhinitis itching, migraines and disorders- hypersensitivity in children.
1	Panipuri	<ul style="list-style-type: none"> Green synthetic colour To make green water Red synthetic colour to make red chuting (garlic Paste) Yellow smthetic colour to make ragada. 	<ul style="list-style-type: none"> Allergic Reactions Infective, carcinogenicity.

Major sweets are :

1.	Motichoor Ladoo and Mohanthal, Kesar Penda, Sonpapdi	Sunset yellow – Ery throsine Hemon yellow – Tartrazine supra Bright pink Red	<ul style="list-style-type: none"> Partial ban by FDA Hyperactivity in children
2	Pista Brufi Kesar Pista Burfi Trirangin Burfi Dudhino Halwo	Fast Green - Triaryl FCF – methane (Parrot Green)	<ul style="list-style-type: none"> Prohibited in EU Blander tumours in male Rats.
3	Chololate Burfi Anjeer Roll	Dark Brown Light Brown	<ul style="list-style-type: none"> A amaranth Di sodium solt of disultonates.
4	White sweet Penda- Burfi	Titanium ox dioxide	

5	Thabdi Thabdi Penda Browne	Red 2G Disodium 8-acetamido 1-hydroxy 2-phenylazo Naphthalene 3,6- disulfonate Chocolate Disodium 4-4-(2, 4 Brown H.T. dihy 5-Mehyle-1,3 Phenylene biazio) di Naphthelene-1 Sulonate) Red 1 Ponceau sx	For Asthma patients, it is allergenic. Hyperactive behaviour of children nervousness.
6	Gulub Jamu	Carmoisine	Approved by WHO, EU Research is going on it's carcinogenic Risk
7	Dry Halwo	Green S. Trippen/methane Indigo Carmine 5-5'- indigo disulfonic acid. Red-3 (pink) Erythrosine	Poor stability may rise blood pressure Prohibited in USA and Norway

1	Faphada Ganthiya Sev Jalebi	Sunset Yellow Lemon Yellow Bright Pink Red.	Partial ban by FDA. - Allergic reations.
2	Besan	Sunset Yellow	
3	Chorafali	Bright Pink Red	Hyperactivity in children

ICE CREAM			
1	Butter scotch	Annatto	It may cause allergic reactions in those who are sensitive.
2	Strawberry	Sunset Yellow + Allure Red	Allergic
3	Pista	Apple green	Carcinogenicity, nontoxicity and hyper sensitivity.
4	Mango	Erythrosine supra	Partially banned
5	Rose	Red Tartrazine supra	It is not permitted in USFDA, Halal policy
6	Jammun	Amaranth	FDA banned may replace by Allura Red AC
7			
8	Salad Dressing	Blue # 1 Red # 40	Research is going on to consider safe for human consumption.

RECOMMEDATIONS:

1. Food labels must state clearly name of colour means "Caramel" or "Red#40"
2. Non-Food product like toothpaste, mouthwashes must labeled and grade name of colour.
3. Some of the artificial colours are dangerous to kids consumer must clearly "Warn"
4. Acceptable daily intake must indicate on label.
5. To avoid "Guilty Pleasure" Guilty person must be punish quickly and publically.
6. Many of street food venders are simply cooks, haven't knowledge of food colouring, even difference between dye grade colour and food grade colour".
7. These food venders must educate about "food colouring".
8. Synthetic colour additives also known as certified colours are required to undergo batch certification.
9. Buy sweets and desserts from reliable sellers.
10. Article food dyes are petroleum derived substances that give colour to food. The safety of these dyes is highly controversial. Natural form at food is highly recommended.
11. Teach your children about artificial food colouring and it's effect.
12. Train manufacturer about standards and processes and about latest research.

13. Almost all synthetic food colours are not advisable.
14. Train manufacture about standards and processes and about latest research.
15. In Microwave popcorn, pertluo rooctanoic acid (PFOA) is used as a whitener. Which is responsible for kidney cancer if it exceeds the deliy doce.

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