

Updates on the Management and Standards Development
Associated with Special Foods
Portion Control as a Regulatory Risk Management Instrument for
Bioactive Substances in Food

Rasha Galal

National Food Safety Authority of Egypt (NFSA)

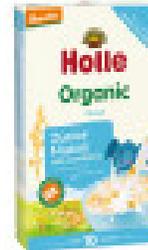
1ST GLOBAL FOOD REGULATORY SCIENCE SYMPOSIUM -Nov 21st 2021

About NFSA

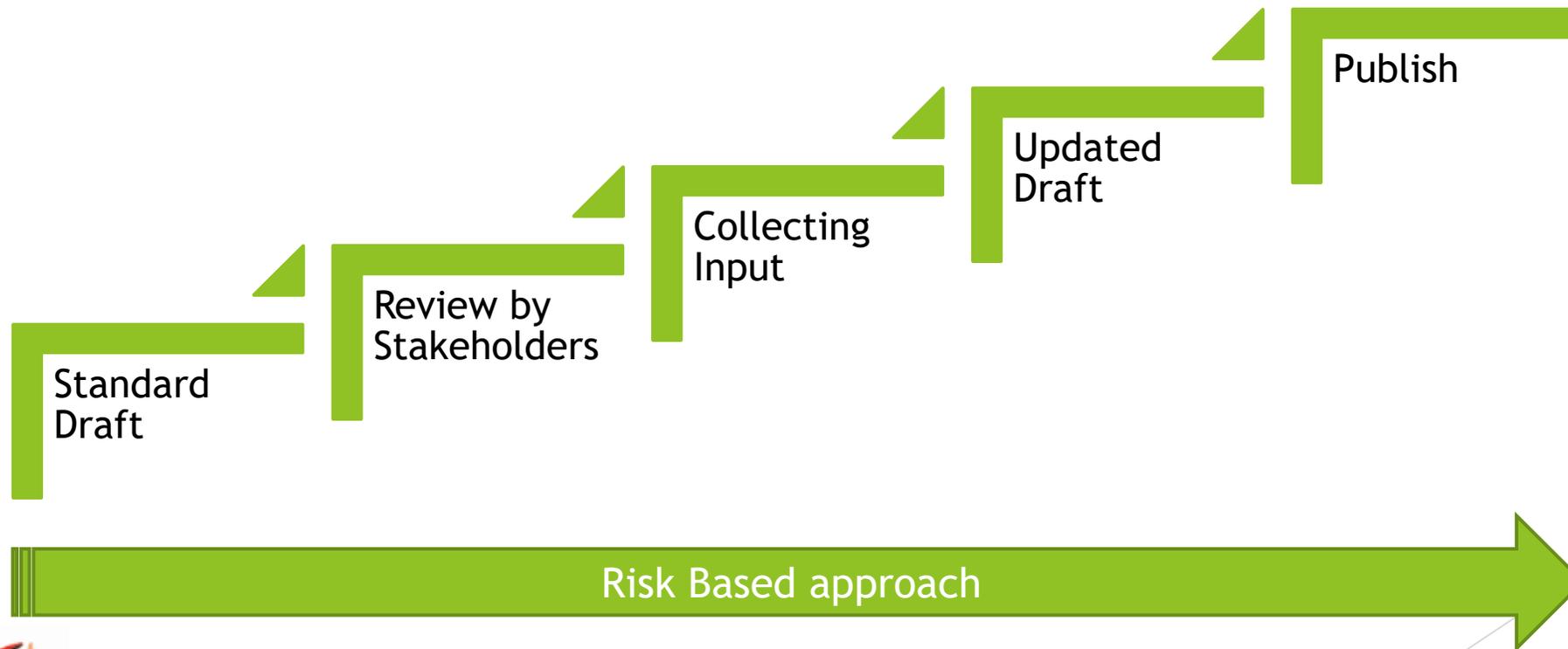
- ▶ NFSA was founded in Jan 2017 to handle all food safety related issues which were previously handled by many different control bodies.
- ▶ Special Food Dept followed in Aug 2018

Categories Subject to Licensing

- ▶ Infant Formula
- ▶ Infants and small children food
- ▶ Fortified Food and Beverages.
- ▶ Dietary Supplements
- ▶ Supplements for Athletes
- ▶ Caffeine based Energy Drinks (CEDs)



Methodology for Standard Development



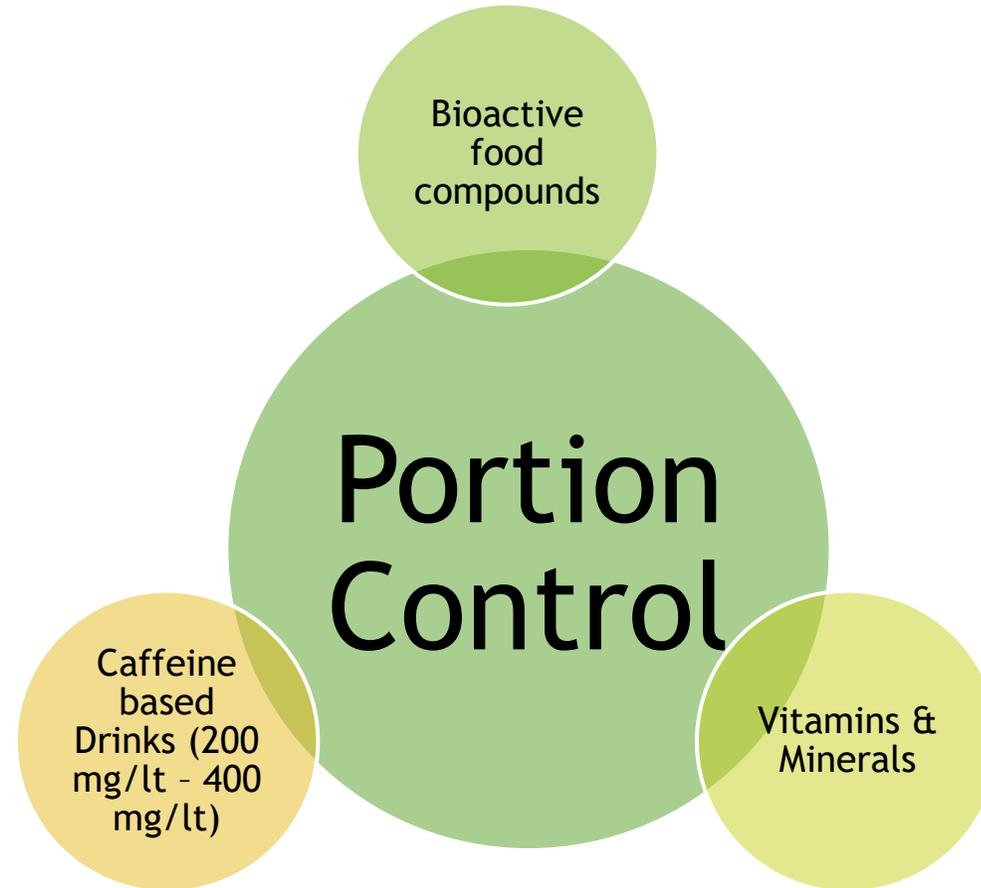
Why CEDs First ?

Increasing Market Demand

Limited Global Standards

The need to set controls to avoid misuse by major consumers (young adults)

CEDs Standard- Risk Identification



Bioactive Substances



Bioactive substance in Energy Drinks

Supplement Facts		
Serving Size 8.0 fl.oz. (240 mL)		
Servings Per Container: 2		
Amount Per Serving	% Daily Value	
Calories	100	
Total Carb	27g	9%*
Sugars	27g	†
Riboflavin Vit B2	1.7mg	100%
Niacin Vit B3	20mg	100%
Vitamin B6	2mg	100%
Vitamin B12	6mcg	100%
Sodium	180mg	8%
Taurine	1000mg	†
Panax Ginseng	200mg	†
Energy Blend	2500mg	†
L-Carnitine, Glucose, Caffeine, Guarana, Inositol, Glucuronolactone, Maltodextrin		
*Percent Daily Values are based on a 2000 calorie diet. † Daily Value not established.		

Nutrition Facts	
Serving Size: 1 Can (8.4 fl oz)	
Amount Per Serving	
Calories 100	
	% Daily Value*
Total Fat 0g	0%
Sodium 175mg	7%
Potassium 175mg	5%
Total Carbohydrate 24g	8%
Sugars 21g	
Sugar Alcohols 3g	
Protein 0g	
Vitamin B3	100%
Vitamin B5	100%
Vitamin B6	200%
Vitamin B12	3000%
*Percent Daily Values are based on a 2,000 calorie diet	

Consumption Data

- ▶ According to the EDE, over the last 25 years, energy drinks have experienced considerable growth in popularity and thus, are now consumed in most parts of the world. Despite this success, energy drinks are in fact still a niche product, representing only 1 % of the overall non-alcoholic beverages market.

Over-consumption “Risk management”.

- ▶ Bioactive substances such as herbal ingredients and their extracts may have a pharmacological effect if consumed at high levels.
- ▶ Although many of these herbal extracts have been deemed as safe for consumption, their use in food might pose a risk since food is consumed “as much as one desires”
- ▶ Also, over consumption of vitamins and caffeine may pose additional risk.

Why portion control? Risk Mitigation

- ▶ Controlling the daily intake of bioactive substances, some may even have maximum daily dosage.
- ▶ Addressing overweight and obesity, and in promoting the responsible consumption of caffeinated beverages such as energy drinks.

In 2019, the OECD report on obesity, *[The Heavy Burden of Obesity](#)*, concluded that portion size restrictions can be used as a public health instrument to reduce consumption of energy-dense foods. This could be done by “providing food in single portions, banning large portions, marketing of the desired portion size or designing products to clearly delineate a portion”.

Why portion control? contd.....,

- ▶ A 250 ml can of a typical energy drink contains around 80 milligrams of caffeine. According to conclusions of the [European Food Safety Authority](#), 75-80 milligrams of caffeine in a single serve is all that is required to achieve the functional effect that energy drinks provide.
- ▶ As a result, the perfect portion for any caffeinated food has about 80 milligrams of caffeine.

شكرا

Thank You

shutterstock.com · 1263447895

1210307118